

01.243
1445
974

A SOCIAL IMPACT STUDY OF
COLSTRIP GENERATING
PLANTS #3 AND #4

01.243
1445
974

3
301,243
M445

A SOCIAL IMPACT STUDY OF COLSTRIP

GENERATING PLANTS #3 AND #4

Summary of Interview Data

STATE DOCUMENTS

prepared by

Community Service Program
(formerly Institute for Social Science Research)
University of Montana
Missoula, Montana

for

MONTANA STATE LIBRARY
930 East Lyndale Avenue
Helena, Montana 59601

STATE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

and

STATE SOCIAL AND REHABILITATION SERVICES

July 31, 1974

Montana State Library



3 0864 1003 4593 6

CONTENTS

	<u>Page</u>
FIGURES	iv
TABLES	v
PREFACE	vi
INTRODUCTION	1
PART I: THE STUDY AREA - DESCRIPTION, HISTORY, AND PRESENT SITUATION	8
Description of Principal Communities	8
History of the Study Communities	13
Present Economic Situation and Planning Picture for Forsyth, Colstrip, and Vicinity	14
Discussion	20
PART II: THE REACTIONS OF RANCHERS	24
Ranchers in the Study Area	24
Discussion	37
PART III: THE REACTIONS OF TOWNSPEOPLE	41
Townspeople in the Study Area	41
Discussion	54
PART IV: SOCIAL EFFECTS AND OTHER CHANGES ATTRIBUTED TO INDUSTRIAL DEVELOPMENTS	59
Social Effects and the Social Structure	59
Changes Brought by Coal Development	72
Discussion	80
PART V: A QUESTION OF VALUES	85
Ranchers' Values and Vulnerabilities	85

CONTENTS (continued)

	<u>Page</u>
Most Workers, Too, Are Paying a Price	90
Discussion	93
PART VI: SUMMARY AND SUGGESTIONS FOR FURTHER RESEARCH . . .	100
Summary	100
Suggestions for Further Research	108
APPENDIX A: METHODOLOGY	115
Ethnographic Study of Social Impact	115
Sociological Sampling	123
Ongoing Validation of Data	130
Documentation	131
Observer Bias	134
Concluding Note on Ethnography	135
The Case Study's Research Team	140
APPENDIX B: NUMERICAL DATA CONCERNING THE SOCIAL IMPACT OF COAL DEVELOPMENT IN SOUTHEASTERN MONTANA	153
Introduction	153
Composition of Study Region	153
Vital Statistics	154
School Enrollment Data	157
Welfare Data	159
Arrest Data	162
Community Data	163
Some Final Comments Regarding the Numerical Data . . .	163

FIGURES

<u>No.</u>		<u>Page</u>
1.	Colstrip, Montana	10
2.	Forsyth, Montana	11
3.	Rosebud County and Vicinity	12

;

.

TABLES

<u>No.</u>		<u>Page</u>
1.	Vital Statistics - Montana	156
2.	Public School Enrollment - Montana	158
3.	Public School Enrollment - Montana Study Region . .	160
4.	Welfare Data - Rosebud County, Montana	161
5.	Public School Enrollment - Rosebud County Study Communities	164
6.	Selected Variables for Rosebud County	166

PREFACE

The report which follows is already book length, and so prefatory remarks will be as brief as possible. These remarks will be confined to suggesting to the reader a frame of reference for reading the report and to acknowledging the efforts of the several people who did the research, processed the data leading to this document, and helped make this study possible.

The reader will notice that there is little separation of descriptive from analytic materials in this report. The reason for this is that the primary analyses were done during the course of participating in intensive personal interviews with study area informants. The fieldworkers continually used these interviews to generate, discuss, and refine ideas which emerged in the course of doing the research. As a result of employing this method of combining data gathering with data analyzing, the researchers' report of interview findings necessarily contains some of their own analyses in addition to those of their informants. Descriptive accounts in the report are accordingly composed of the analytic work done by both informants and fieldworkers during the course of discussing coal-related social impact with each other.

Every effort has been made to show when the researchers are speaking for informants and when the researchers are speaking for themselves. However, because the researchers were so intimately involved in generating the data, they naturally appear in it from

time to time. Thus, while most of the researchers' formal analyses are put into separate discussion sections or footnotes, some of them seem to make more sense or otherwise to be more appropriate when placed in the text proper. In any case, a considerable effort has been made to keep the reader continually informed as to who is being represented, the general rule being that the researchers are speaking for informants unless they indicate that they are speaking for themselves.

The reader will also note that some informants whose observations are quoted or paraphrased seem to be astonishingly insightful and articulate, so much so that the reader may wonder if all of these informants are "for real" and if all that is attributed to them is completely theirs. The simple truth is that the method used to locate informants was designed to steer the researchers to those who were most likely to be especially thoughtful, knowledgeable, and articulate observers of the local scene. The researchers did in fact interview some very impressive natural social analysts, learned much from them, and relied heavily on their analyses of the difference that the Colstrip generating plants and other coal-related developments were making in their own lives and in the lives of others in the area.

The researchers in the field were Raymond Gold and Alice Sterling. These two did the interviewing and primary analyses for this report. Kathy McGlynn did further analysis, roughed out and polished up this document, and generally oversaw the

production of the report. Ed Dobb gathered numerical data and did much of the map work pertaining to the study communities and surrounding area, and Julie McVay skillfully typed the report.

Thanks are due not only to the research team members but to others who assisted them in various and important ways. Albert Tsao of the Department of Natural Resources and Conservation and Frank Smoyer of the Department of Social and Rehabilitation Services have actively supported the project throughout its existence. Ted Clack of the Montana Energy Advisory Council has helped the research team in countless ways, not the least of which has been the valuable analytic insight he has offered on many occasions.

Thanks are due, most of all, to the hundreds of people in Montana who unhesitatingly gave of their time and of themselves whenever the team asked them to talk about the social impact of coal-related development. On many occasions they generously supplied team members with food and drink as well as with the opportunity to pick their fertile brains. This combination of offerings was frequently very heady stuff indeed. The research team members salute all their informants and wish them well.

INTRODUCTION

The purpose of this report is to apprise the Montana State Department of Natural Resources and Conservation and the State SRS of the Community Service Program's (formerly the Institute for Social Science Research) findings regarding the pervasive social impact which Colstrip generating plants #3 and #4 are likely to have on the social patterns and processes (i.e., on the way of life) of people living in southeastern Montana. Findings have been couched in terms of the effects which plants #1 and #2 are already having on the residents in this area, viz., Rosebud County and vicinity. Attention has also been given to the social impact of strip mining in this area because the coal needed to run the generating plants will be mined locally.

The research presently being reported was much more comprehensive than originally intended because funding from Northern Great Plains Resources Program permitted it to begin a few months earlier and to be more fully staffed than would otherwise have been the case.

This report has grown out of several hundred contacts made during the past seven months with people living in and around Forsyth and Colstrip, Montana; and intensive personal interviews were done with over two hundred of the people contacted in the study area.¹ Persons interviewed included both landowners and

¹The technique used for gathering the data is called sociological sampling, so named because it relies heavily upon the natural, social knowledge of people in the study area to assist in quickly locating the most useful and credible information

townspeople in the study communities and surrounding vicinity. The latter informants represent a variety of occupations and professions, including government officials, merchants, store employees, land brokers, financiers, health professionals, welfare workers, students, educators, laborers, engineers, housewives, clergymen, tribal representatives, law enforcement personnel, senior citizens, newsmen, and lawyers.

In general, interviewing was confined to Rosebud, Big Horn, and Powder River counties because the principal strippable coal is here--at least 85 percent of which belongs to the federal government--and because this is where the principal mining and leasing activity is located in Montana. Numerical data for Rosebud County and for the counties surrounding it were also gathered, however (see Appendix B). This additional information was desired for comparative purposes and to help document interview findings, but this report relies almost exclusively on the interview data.

Two Indian reservations lie in the study area, but they are not included in this report. It was hoped that the studies by the Northern Cheyennes and Crows (funded by the Office of Economic

sources. Accordingly, sociological sampling calls for enlisting the direct assistance of local informants in identifying significant social categories in the community and in finding ways of getting in touch with people who are locally thought to be good representatives of these categories. This technique rapidly yields data that is every bit as reliable and valid as that obtained through probability sampling, a noteworthy difference in results being that the latter procedure permits making finer numerical discriminations when comparing categories of responses. For example, sociological sampling may reveal that the great majority of ranchers oppose coal development; but a probability sample would have to be taken if it became necessary to know if this great majority consisted of exactly, say, 82 percent or 91 percent of the ranchers. In addition to producing data much faster than probability sampling can, the sociological sampling procedure has the singular advantage of revealing empirically grounded ways of explaining the data. The methodology employed is described in more detail in Appendix A.

Opportunity), which included provisions to do social impact research, would move along fast enough to open up some research avenues to the investigators during the study period. This did not happen although at the present writing definite arrangements are being made to work with the Cheyennes to generate some social impact data on and around their reservation. Accordingly, all that can be said at present is that in light of the wishes and predilections of these two groups of Indians, whose land contains large quantities of strippable coal, the researchers have not yet attempted to do any systematic and comprehensive fieldwork among the Crows and Northern Cheyennes.

The research done for this study employed an ethnographic approach. As detailed in Appendix A, there are a great many advantages in this manner of obtaining data on what is happening to the people who are directly and importantly affected by the strip mining of coal, the construction and/or operation of coal-fired electric power generating plants, and the anticipation of further industrialization and urbanization of coal resources in hitherto rural settings. While the findings have yielded significant insights and understandings and have suggested some generalizations, further research utilizing both the present and other methods of sampling and analyzing the study area will have to be done before the changes in human organizations, social relationships, and individual behavior, collectively known as "social impact," can be more thoroughly spelled out than it has been possible to present here.

Although some social changes resulting from the industrial processing of coal in rural areas are apparent almost at once, others are evident only after several months, and "still others emerge only after much more time has passed. The research task is to systematically record, analyze, and explain these changes as they occur--and to seek ways of anticipating them so that they may be planned for or managed in whatever manner those concerned think acceptable and good. The last section of this report has attempted to point out precisely what further research will have to be done to fill in many of the gaps in awareness and understanding which remain concerning the social impact of coal-related industrial development.

The reader is advised that this report is an effort to faithfully represent what the identified groups and categories of informants perceive, think, feel, and do with respect to the Colstrip generating plants and other coal-related developments. The reader will note some conflicting statements, naturally, since the researchers are reporting what a variety of people told them over a period of time. In the interest of brevity, like comments in several instances have been paraphrased and merged into one quoted statement; all other quotations are verbatim except where editing has been necessary in order to protect the identity of the speaker.

It should be noted that the authors are expressing the views of their informants; they have taken pains to point out when they are speaking for or about a given category of persons and when one category of informants is speaking for another. They have

attempted to make explicit when they themselves are generalizing or commenting about the data, i.e., about what was observed and told to them. Researchers' comments are ordinarily placed in "Discussion" sections following the paraphrasing, quoting, and summarizing, which in this case constitute the account of coal-related social impact in the study area.²

Why study social impact such as that created by the installation and operation of coal-fired generating plants? Although considerable literature exists concerning the reaction of small town and rural residents to growth and development, little empirical research has been performed to link changes in attitudes to changes in circumstances and in behavior. It is probable that long-term residents will alter their perceptions toward growth and control as recognition of the effects of growth becomes evident and that recent arrivals will hold significantly different attitudes regarding industrialization than do established residents. The dependent variables, such as resident satisfaction with goods and services, attitudes toward growth, and stands taken regarding land use and water resource planning, are related to some of the

²To verify and validate what was learned from their interviewees, the researchers asked representative informants to criticize and comment upon earlier drafts of this report. Several of the study area's residents agreed to do this and helped correct several errors of fact and interpretation and suggested better ways of describing social impact as they understood it. Although these informants represented all known points of view concerning the generating plants and other coal-related developments, none of them challenged any of the depictions of what was happening in their group or social category in consequence of these developments.

most important issues confronting areas of high growth in the United States. Any information generated concerning these issues should be of value for subsequent planning and development in the study area and in comparable communities undergoing change.

Most obviously, many of the social impact problems associated with coal resource development in the study area must be dealt with at the local community level. However, the resources of state and federal governmental agencies will most likely be available to local communities as they attempt to solve local impact problems. The extent to which these outside resources are utilized in local problem solving will very likely depend upon the skills, organizational know-how, and knowledge of local community leaders. The social impact described in this report should assist all concerned personnel.

Governmental agencies at local, state, regional, and national levels can use the findings of social impact research to influence the formulation of social policy pertaining to development and utilization of natural resources such as coal and water. These agencies can also draw on findings to design ways of realistically and effectively implementing public policy which legislative bodies establish. These policies would serve the public especially well if they adequately took into account the actual social costs (such as effects on the environment and rearrangements of life chances and styles) of pursuing given developments, such as power plant installation. Legislators should find social impact studies of assistance when enacting statutes which become public policy

for planning and actualizing industrial growth. Representatives of industry should also find such research helpful for managing social impact variables at all stages of their operations. In addition, residents in the study area should find the research data of immediate value for making personal decisions, for example, selling or leasing versus expanding their land holdings and trying to influence various facets of coal development.

Finally, the results of studying social impact may have far broader application than to the immediate research situation. For example, other areas which may someday be confronted with economic developments of a similar or comparable nature to that of concern in the present report can use the results of this study to identify important variables which may facilitate the delineation of problem areas, may suggest problem solutions, and may indicate ways socio-economic transition periods can be made as smooth as possible.

The researchers have not exhausted all analytical possibilities nor have they unraveled all the complexities of the current human scene in the study area and how this scene is being affected by the power plants and other coal-related development. Such an effort would require a much longer period than the present study was allowed. It should be evident, however, that the effects being created by and attributed to coal development activities are pervading virtually all aspects of life to some degree.

PART I: THE STUDY AREA - DESCRIPTION, HISTORY,
AND PRESENT SITUATION

Description of Principal Communities

Fieldwork during the past seven months concerning the impact of Colstrip generating plants #3 and #4 on the social patterns and processes (i.e., way of life) of people living in Rosebud and contiguous counties has focused upon the social effects which present plant construction activities contracted for by Montana Power and its associates have had to date upon Colstrip and Forsyth, Montana, including the Decker-Birney-Ashland area, and upon the present and anticipated social impact of strip mining in the area. This part of the present report introduces the reader to Forsyth and Colstrip (populations approximately 2,700 and 1,800, respectively), the principal study communities of this research.

Colstrip, formerly a very small community with only a school, post office, and mining activity and populated almost exclusively by teachers and retired people, has become a modern day, burgeoning mining camp with the construction of two coal-fired electric power generating plants under way. Although Colstrip is a one-company town belonging to Western Energy, a wholly owned, coal mining subsidiary of the Montana Power Company, construction of the two 350-megawatt plants is a joint project of two companies: Montana Power and Puget Sound Power and Light. At present, the town still has virtually no business community or center, although plans have

been made for a shopping center at one end of town (see figure 1). Because the residents do not walk around town very much (there is so little to walk to), the community appears deserted except during working hours, when evidence of inhabitants is readily visible at the school and post office.

The community of Forsyth, a small town about 35 miles north of Colstrip, is situated in a bowl-like valley, bordered by the Yellowstone River to the north. The casual observer finds the residential part of town very pleasant; located on a flood plain, it has lots of trees and other greenery. In contrast, the downtown portion, located one block from the railroad, is quite run down; and remodeling, rebuilding, and general face-lifting activities are reportedly needed to make the commercial center attractive. The community is an established trade center for the area, the county seat of Rosebud County, and the closest town of any size to Colstrip, unless one ventures an additional 45 miles east to Miles City or 101 miles west to Billings. The latter communities are also feeling the effects of coal development in eastern Montana, but Forsyth is the one most directly affected by the construction and mining activities in Colstrip.¹ A map of Forsyth is presented in figure 2, and the study area is outlined in figure 3.

¹Selected preboom vital statistics for Rosebud County, where both Forsyth and Colstrip are located; the surrounding region (defined on page 153); and the state are presented in table 1, Appendix B. Figures concerning the effects of population growth occurring in 1973 and 1974, critical years for coal development in this area, are not available as of this writing.

Figure 1. Colstrip, Montana

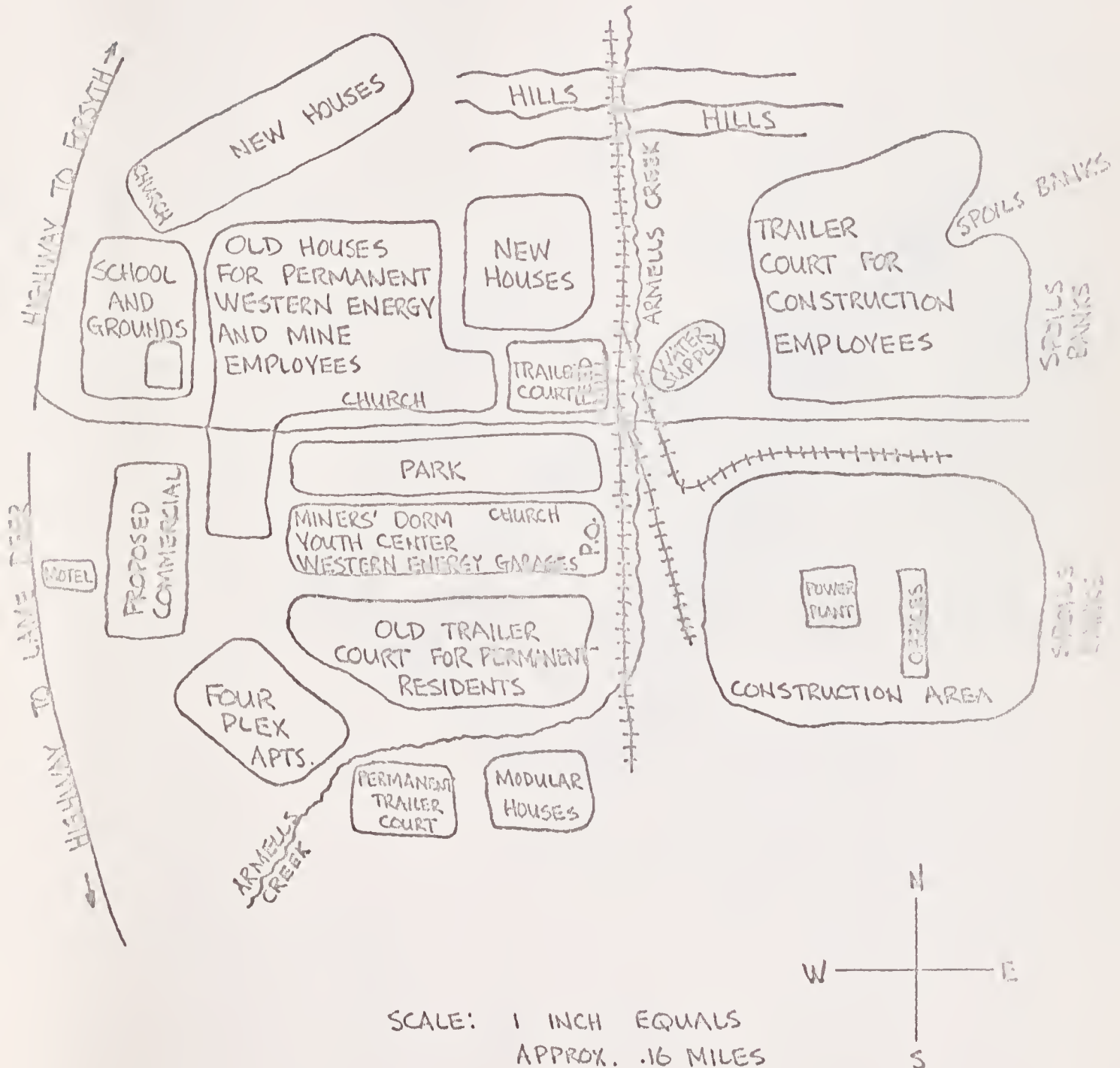
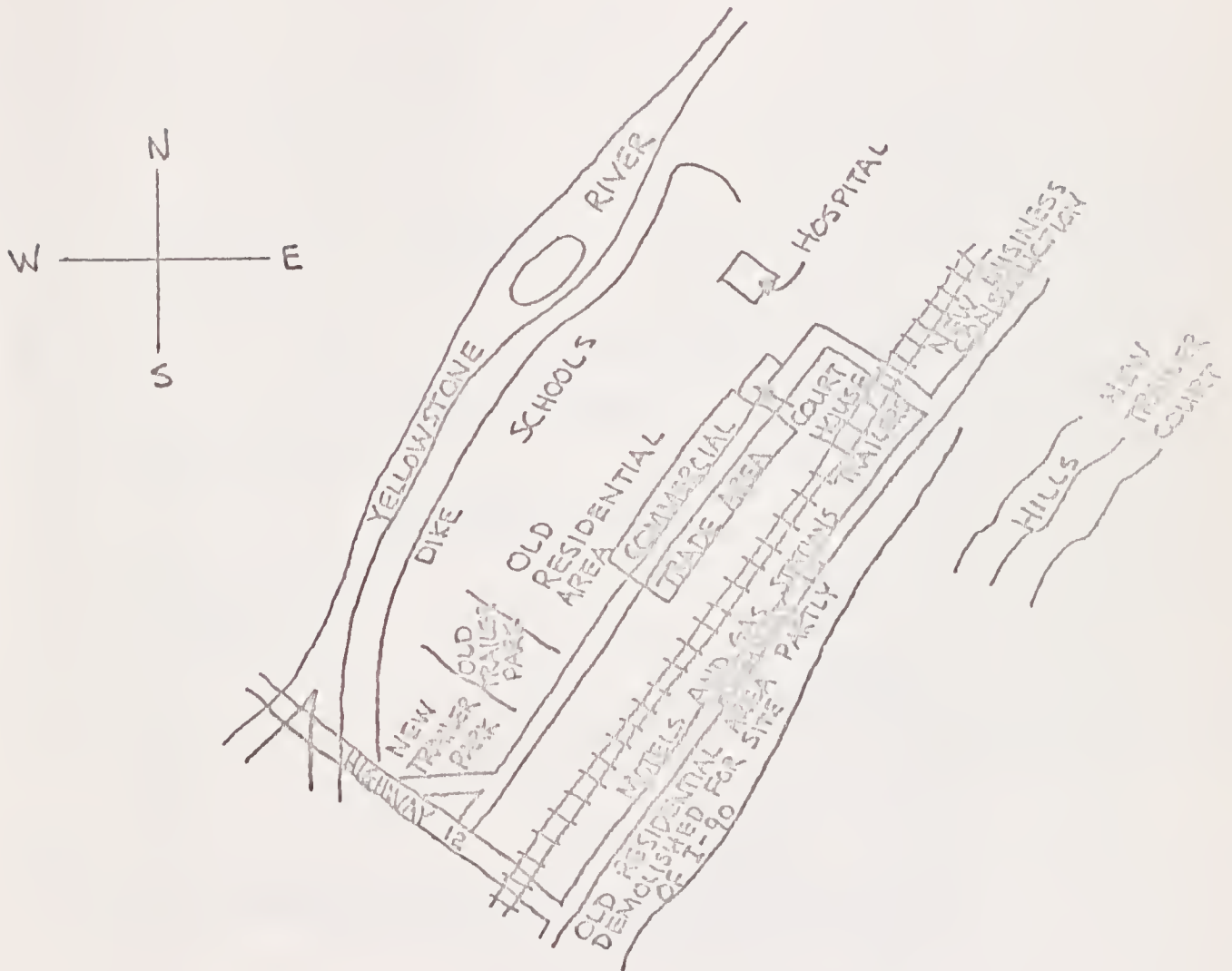


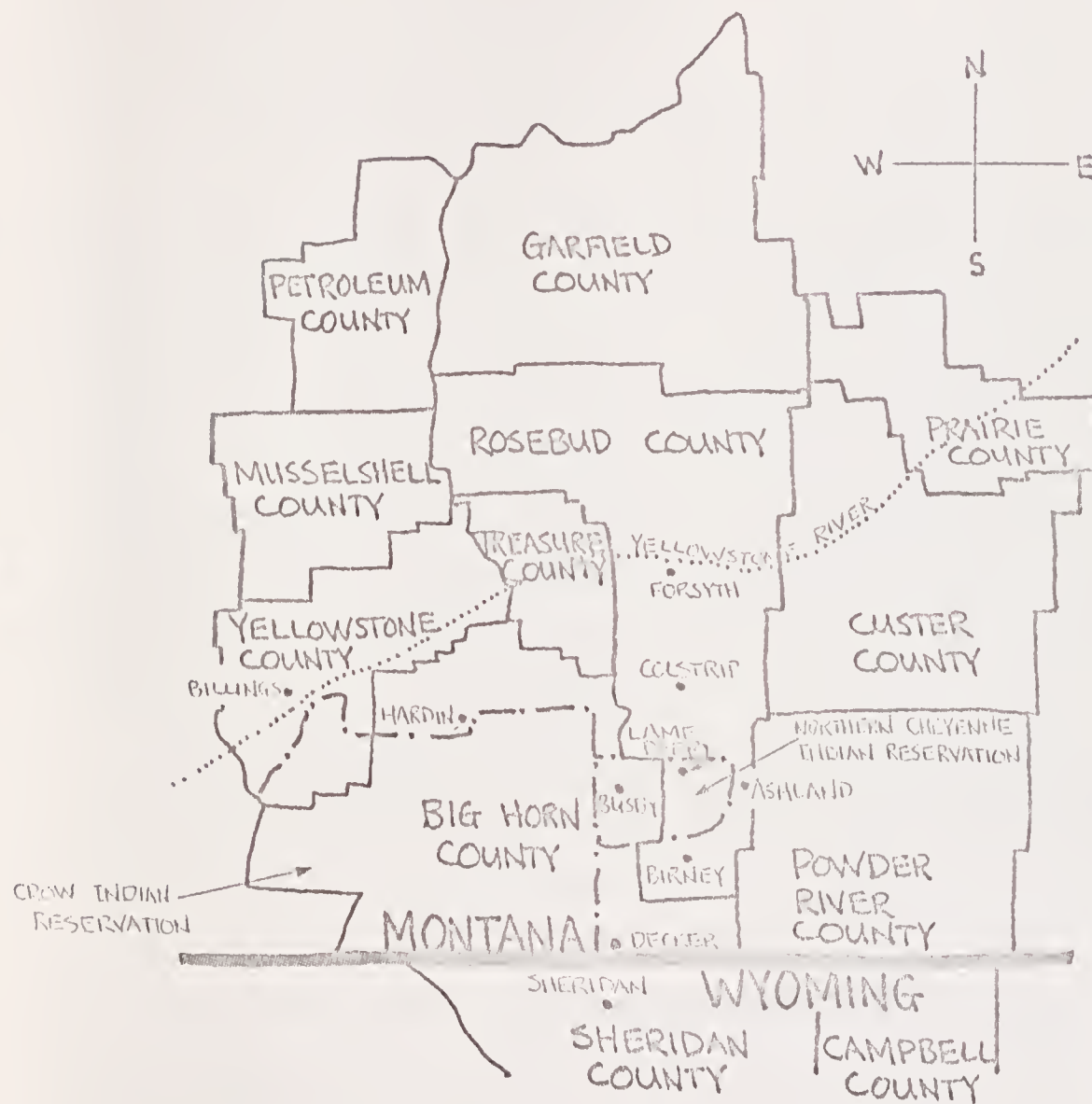
Figure 2. Forsyth, Montana



SCALE: 1 INCH EQUALS
APPROX. .3 MILES

SOURCE: RESEARCH NOTES

Figure 3. Rosebud County and Vicinity



..... YELLOWSTONE RIVER

— INDIAN RESERVATIONS

SCALE: 1 INCH EQUALS
APPROX. 40 MILES

SOURCE: RAND McNALLY
ROAD ATLAS, 1973

History of the Study Communities

In 1883, the Northern Pacific's line was completed through Forsyth and beyond; and Forsyth's first school was constructed at that time. The town thrived as a railroad division point, as the county seat, and as a shopping and commercial center, reaching its peak in 1923. In that year there were probably close to 2,500 people in town, including five or six medical doctors, an equal number of lawyers, and many bustling businessmen. The railroad strike of 1923, during which time about sixty families left Forsyth, led to a decline in the town's division point status and in its general fortunes. Mining at Colstrip helped Forsyth through World War II; following the shutdown of Colstrip's mine in 1959 there was a reduction in the number of railroaders at Forsyth, and the town's economy stagnated until revitalized by plant construction at Colstrip in 1973.

The strip mine at Colstrip opened in 1923, owned by Northern Pacific and operated by its subsidiary, Northwestern Improvement Company, and was a big operation in the 1940s. The researchers were told that production then "was similar to what it will be in 1974." Colstrip's school opened in 1924; Northwestern Improvement Company gave the school to the county (i.e., the local school district) in 1957, just two years prior to closing its mining operations. The mine was sold to the Montana Power Company on June 1, 1959, and reopened in 1968.

Present Economic Situation and Planning Picture for Forsyth,
Colstrip, and Vicinity

Informants report that Forsyth is experiencing an economic boom from the construction and mining activities at Colstrip and from local railroad expansion being done to accommodate coal shipping needs; it was also pointed out that the past year has been an outstanding one for agriculture, which has also contributed to the local economy. Indications of recent growth are quite visible; for example, trailer courts are much in evidence due to the sudden housing shortage. There is also a shortage of labor at all levels, but business is excellent. The labor shortage is attributed to the profitable employment opportunities at Colstrip, which are attracting workers from Forsyth and elsewhere in eastern Montana and from other states as well as Canada;² unskilled laborers, for example, are being paid as high as five to six dollars per hour. However, people in Forsyth and in neighboring towns³ for the most part perceive that the price of everything seems to be rising fast and incessantly; hence, the

²It was reported that Montana Power claims to give hiring preference to Montanans, but some local observers question whether this is really so.

³Neighboring towns are garnering some economic benefits from coal development, notably from the wide-ranging construction workers and from the small number of disgruntled ranchers who no longer wish to shop in Forsyth. Hardin businessmen have expected and looked for a boom which has not yet come and are grateful for what business comes their way from the Forsyth area. While its neighboring communities (including Forsyth) have not made such a concerted effort, Hardin, a near-reservation town, has already made a considerable investment in expanding and modernizing stores in hopes of attracting more business.

value of increased earnings is being eroded. The economic boom has also created a severe land shortage.

The demand for land, especially for small acreage, has soared. Many newcomers desire one-half to fifteen acre spreads, where they can put a trailer house, erect a chicken coop, keep a horse, or simply let the dogs run loose. There is no set price for these smaller pieces of land; in fact, nobody wants to sell. One real estate informant, along with other like-minded persons, is trying to interest ranchers in subdividing but so far has not been successful.⁴ Houses in Forsyth, when available, are selling for a third more than they sold for three years ago. One veteran businessman stated, "This [at this moment] is the first time in my real estate experience that I haven't had a house for sale." While living in a trailer court is the only viable alternative for the present, it provides much less privacy than the occupants desire because there is so little space between neighbors--but at the moment land space is simply unavailable for purchase at any price.

As would be expected, the increases in land values have also been accompanied by increases in rents, housing problems, and--most noticeably--taxes. Older persons who have lived in the area for decades have found that their property values have increased substantially, but there is no inexpensive housing for these senior citizens to move into should they decide that it would

⁴A local joke is that no landowner in the area wants to be the first to subdivide but a few of them sure would like to be the second.

be in their best interests to sell. Their property taxes are almost certain to continue to rise with the current economic boom, perhaps eventually forcing many to sell when they can no longer meet these and other rising homeowner costs on a retirement income. Property tax in Rosebud County, for which Forsyth is the county seat, increased fifteen mills in the last year, in spite of a gain of about \$1.5 million in taxable value of property.

Because Colstrip is a private town, there is no city property tax structure; all residential land and all of the permanent dwelling units here belong to Western Energy. The construction company which has contracted to build the power plants apparently requires that housing provided for its personnel be somewhat segregated. Three major residential areas have been arranged by Western Energy: a temporary trailer court, occupied mostly by construction workers; a permanent trailer court and group of pre-assembled houses, occupied in large measure by engineers, miners, and supervisory personnel; and a neighborhood composed entirely of single-family permanent homes--both old and new, occupied for the most part by permanent employees (executives, teachers, miners, and others).⁵ Differences among these residential

⁵The trailer court for construction workers, referred to as "the ghetto" by some people, is temporary and will be phased out as soon as possible in order to make space for anticipated company installations. Lots here cost between fifteen hundred and two thousand dollars. The other new trailer court, where lots cost five thousand dollars each, and the new houses will be available to the permanent residents of Colstrip when power plant construction ends (it is planned to begin selling off lots and houses in

districts are very noticeable, even to the casual observer. In addition to these housing areas, nine apartment buildings containing four dwelling units each have been constructed, with occupants reportedly carefully chosen so that potential class discord can be averted; and three buildings containing eight apartments each are to be built this summer for new teachers arriving in the fall. The few older homes that house Colstrip's established residents are in sharp contrast to the predominance of mobile units. Reacting to this aspect of development, one informant stated: "Every day I wake up expecting to find that half the town is gone. It's on wheels, you know."

As with housing, Colstrip city planning is entirely under the jurisdiction of Western Energy. Company officials have indicated an interest in starting a town council composed of two representatives from each of the three residential areas.⁶ The council would function as an advisory board and would give the people the feeling that they have a voice in local affairs. Officials are also interested in learning what the residents want. One newcomer at Colstrip felt that the parent Montana Power Company would have to allow for residents' self-determination

a couple of years). Workers ordinarily bring in their own trailers, but provision can also be made to lease them from BURTCO, which manages the temporary court for Western Energy.

⁶One newcomer independently made this suggestion also, adding landowners as a fourth group.

of their own destiny and to face up to the need to provide normal, small town facilities or else the employees would quit and move away; another stated that many men were already leaving because of their dissatisfaction with the living and working conditions.

In contrast to the situation at Colstrip, city planning in Forsyth is open to the desires of community residents. Earlier in the year it appeared to some Forsyth informants that important and appropriate planning for future town needs was materializing much too slowly because, according to these informants, the city council was shirking its leadership responsibilities. This statement was made in reference to an anticipated water shortage this summer. Forsyth's water system has to be modernized and expanded in order to meet the needs of the town's rapidly rising population; and, until a few weeks ago, the city council had been reluctant to come to grips with the situation and to formulate an appropriate bond issue for submission to the voters in time to allow the necessary overhaul to be completed before a shortage occurred. A merchant noted that the city council had a tough problem on its hands in that there was not enough money and not enough space for city expansion; the town will probably have to expand, but given the uncertainties of future reclassifications of land use no one knows what the chances are of using potentially available land for residential and commercial purposes. Zoning has reportedly never been enforced; thus, as one Forsyth informant observed, trailers have been placed hither and yon, but this

placement has been confined to the edges of town. A city-county planning board was established a few months ago, but whether or not this board will be viable remains to be seen.

The business sector is also having difficulty in planning ahead for Forsyth. In spite of the unique opportunity presented them, local merchants evidently are not making a concerted effort to ready themselves for anticipated commercial needs and related developments. One informant explained this situation by pointing out that the business community has never engaged in such planning in the past nor has it felt the need to; further, the magnitude of the impact of actual and likely coal development activities "hasn't hit home yet." Also, because the duration of the presently good economic situation is relatively uncertain, there is much hesitation about taking concrete steps to improve the downtown area. The spirit is one of cautious optimism. Informants noted that some merchants may be cautious about expanding their businesses because they distinctly remember the five-year boom-and-bust period in regard to the oil development activity around Broadus and Ingomar and fear the same bust may follow the economic boom here. Others stated that they were having second thoughts about what continued industrial development would mean (undesirable competition would appear, for example). However, a few individuals are taking steps to go ahead on their own: they have built or are building new and enlarged quarters for their businesses. Also, a few appear to be closing their eyes to the potentials of the situation: for example, owners of two of the

main downtown buildings are reportedly disinterested in modernizing or expanding them.⁷ The local Chamber of Commerce, although certainly mindful of its developmental responsibilities, has not yet formalized plans for commercial growth. In general, local ranchers, who have always prized independence and self-reliance, are suspicious of or opposed to planning of this nature, which they perceive as an urban effort to direct their rural world. In contrast, an engineer stated that because old-timers were not able to cope with new problems, newcomers like himself would have to step in and help--a view which has become increasingly prevalent on both sides.

Discussion

Several matters covered in the foregoing descriptions of Forsyth and Colstrip merit special attention.

1. Since this research began over seven months ago, many things have happened which have had various kinds of cumulative effects on the residents of the study communities. For example, although people in Forsyth generally still insist that they do not feel that their lives have been greatly affected by coal-related developments, it is evident that

⁷As a group, the businessmen so far appear quite willing to put up with the inconveniences, insecurities, and other social costs of rapid urbanization accompanying population growth. They report viewing such costs as minor annoyances which have not yet struck them as important variables in their lives. Others have apparently chosen to ignore the long-term problems.

they are wittingly and unwittingly taking coal-related matters into account in more and more ways. That is to say, even though they do not perceive and report much social impact, their observable behavior reveals that they are in fact increasingly adjusting their actions to coal-related interventions in their lives. These two kinds of reactions (verbal and behavioral) are not inconsistent because informants are still viewing their adjustments to coal-related interventions as hardly more than dealing with such minor annoyances as going shopping at unaccustomed times in order to avoid the rush hours created by the newcomers who live in Colstrip. Feelings of impact are especially easy to gloss over when, as is true of many Forsyth locals, the increase in economic activity is viewed as if it were what happens when the town is enjoying a good and prolonged tourist season--which is bound to be over before too much longer.

2. The role of newcomers is changing and therefore bears watching. In Colstrip more evidently than in Forsyth, it appears to be moving along a path similar to that being established at Gillette, Wyoming, where some "newcomers" have been in residence long enough to become quite well integrated into the community. In Gillette, it is the people who have been there for only a few years (strictly speaking, no longer newcomers but still definitely not locals) who are apt to serve as agents as well as catalysts of social change, roles which locals do not seem to play very readily.

3. Concern about planning is increasing in Forsyth, but demonstrated ability in this regard is still not in evidence. Chronic uncertainty about the future and about the role which local government should play in shaping and preparing for the future is a serious problem concerning which something can be done. For example, government officials at Forsyth could actively initiate schemes for planning and guiding the future growth of the area; and technical assistance could help officials to explain to landowners in the vicinity what planning could do to increase their chances of enjoying, more fully than otherwise, their rural way of life.
4. Other communities in the study area also have high growth potential, for example, Ashland, Montana. Ashland (population 531 in 1970), located along the Tongue River on the northeast corner of a rich coal area, could conceivably turn out to be the "boomiest" town in southeastern Montana.
5. In general, the increased flow of money in Forsyth has not yet been socially defined as a big factor in the lives of most of the town's residents. Excepting those who live on small, fixed incomes, people in Forsyth are generally benefiting economically from coal-related development at Colstrip; but only a comparative few Forsythians spend much time reflecting on development, talking about it, altering traditional behaviors in consequence or in anticipation of development, trying to imagine themselves living very differently as a result of development, and so on. These and

other concerns are typically very evident among landowners in the area. The rural people's tendencies to feel anomic⁸ (i.e., to feel a sense of powerlessness, normlessness, and what's-the-use-ishness), to experience reality shock⁹ (i.e., to feel deluged by a surfeit of social change), to scapegoat, to consider having to reorganize their lives, and the like are simply not very evident in town.

6. It should be kept in mind that, as reported here, social impact results from things which have actually happened and are happening to the study area's residents, and from whatever they anticipate or imagine will happen to them as a result of future coal-related developments. The description of the social impact of power plant construction and strip mining is based upon interview accounts of past and present happenings and upon their effects on those concerned. Power plant operation, the construction and operation of coal gasification plants, and additional strip mining and power plant construction are expected to occur in the study area in the foreseeable future. Anticipating these industrial interventions, ranchers (and some others) in the study area are already being affected by what they imagine will be the social consequences of such industrialization.

⁸Emile Durkheim, The Division of Labor in Society, trans. George Simpson (New York: Free Press, 1933).

⁹Alvin Toffler, Future Shock (New York: Random House, 1970).

PART II: THE REACTIONS OF RANCHERS

Ranchers in the Study Area

The majority of ranchers in southeastern Montana interviewed to date are against all-out coal and energy development and would really like to see the coal people go away forever. As a group, these are mostly younger men who have inherited and are upholding a family tradition of cattle raising. They are traditionalists. Although many of these informants run very large and profitable ranching operations, others have smaller spreads and are doing less well economically. While limiting development to strip mining might be tolerable, they and their hired hands think the whole business is wrong. They are committed to maintaining the land and its integrity; and they unswervingly devote themselves to a ranching life-style, regardless of the fact that for some (hired hands especially) a different career would probably be more lucrative. If they do not fight development they are faced with the unpalatable and uncertain prospect of selling out and relocating. Many consider leasing unthinkable because they believe that it would lead unalterably toward massive industrialization, and the economic benefits to be gained would be far outweighed by the social problems and costs such action would entail.

Those who favor development constitute a divergent group. There is some evidence that they usually do not have the same family ties to the area as do their neighbors. Some are reportedly poor managers who are trying to regain their losses or who are

getting back at unproductive land. In the past, ranchers tended to identify strongly with big business. Those who are against development are rapidly becoming disenchanted with big business because they perceive that many valued natural resources will be destroyed as a by-product of the activities of power, coal, and railroad companies. Those favoring development are optimistic about getting their land back after it has been mined and believe that the land will not be totally and irrevocably destroyed. The general view is:

If we can send people to the moon we can figure out how to reclaim the land. We could improve it by putting coal money into leveling and irrigating it. In the long run, coal development is good for the land. In the short run, coal development will certainly mess up the land and some damage will be irreparable, but we should be able to live with it.

Such individuals expect to be able to continue to ranch and to lease back their land or buy it back after mining has taken place, which they believe will require a relatively short period.¹ The researchers doubt that members in this group (or in any other group in the study area) adequately comprehend what lies ahead

¹It appears that very few ranchers in southeastern Montana have actually sold land to coal companies or land speculators. "If you sell out, then what will you do? You will no longer have roots and you will do and be nothing." One rancher who has leased said, "We'd all want to sell to another rancher if we sell, but only to another rancher." This informant is revealing his reverence for the land and a commitment to keeping it productive for cattle raising. The difference between selling and leasing to coal companies is mostly symbolic, however, since in both cases the land would be torn up if industrialized.

with all the new plants proposed and the number of people expected to come in; they have seen only a very small segment of development so far and find it hard to imagine the real consequences entailed. One informant contends that this closing of eyes to the future makes it easier for pro-development ranchers to "justify their greediness" in getting money from coal.

Who is for or who is against coal development is not simply a matter of who has fee coal (i.e., coal which belongs to the surface owner) underneath his land. Although the presence of coal may well be a factor, it does not fully explain ranchers' views since several who are opposed to development do have coal in their land and have been offered a great deal of money for it. A partial explanation is that those who tend toward being pro-development usually defend their view in the publicly acceptable terms of being obliged or duty bound to help the nation deal with its energy crisis: there is a need for development and it presents a challenge. Anti-development people do not accept the assumption that strip-mined coal is needed to solve the energy crisis, pointing out that coal closer to the source of need could be mined (e.g., in Appalachia), that deep mining in the Fort Union Basin and exporting the coal to appropriate metropolitan areas could be done, and that solar or wind power could be developed to meet energy needs--all without requiring people like themselves to pay terrible social costs for short-run energy benefits.

Very few persons believe that coal development and ranching can go on side by side. Individuals who so believe are mostly older persons, although a few of the younger ranchers are known to

take this optimistic view. Those who subscribe to this belief seem to feel that there is money to be gained from coal, and so one might as well take advantage of it. Most landowners interviewed find that the threat and likelihood of large-scale energy development are like a pall hanging overhead all the time. There is a great deal of uncertainty about what is going to happen and a great deal of dissatisfaction concerning the actions of the companies and corporations involved.

Some ranchers point out that power and coal companies are unfair, untrustworthy, and inconsiderate (for example, they believe that the flattest and best agricultural land tends to be the initial site of mining operations)² and receive preferential treatment from various public agencies. For example, informants note that the big companies pay less for utilities than small ones or individuals do, although one person felt that this situation was defensible. In addition, these firms appear to pay less than their share of taxes. Coal and power companies bring about school and other problems but feel no obligation to do anything to forestall or solve them;³ as one informant stated, "We pay the costs and the company reaps the benefits." The companies also reportedly

²One company official said that most coal is not found under farmland. The flat-lying coal seams of eastern Montana have, in most instances, been eroded away in the valleys where most farmland is farmed.

³However, a few weeks ago, Montana Power Company publicly announced that it would help Colstrip to secure several badly needed temporary classrooms for use in the next school year.

lie about their intentions for development--for example, about power line placement plans and intended commitments.⁴ Their statements of intentions, no matter how viewed, are just not believable. Ranchers typically report that the coal companies are deceitful and appear to be interested solely in making money; providing a service is of secondary importance. One rancher said:

Mining companies make fools of us. They always lie about what they're intending to do and how much of it they intend to do. They are sneaky, deceptive, and so on. They get you to sign easements through lying and then it's too late to get a fair deal.

Landowners report that there is a lot of effort going on by coal, power, and construction company officials to try to bluff, coerce, and even intimidate the locals into doing their bidding and that the situation amounts to a kind of war in which the locals or landowners are viewed by the companies as the enemy and all is fair.

Some informants note that farmers and ranchers make the mistake of treating corporations as people, but the companies

⁴Informants mentioned many times that representatives of the Montana Power Company lied when asking for permission to put power lines through the area. The general approach is that the company representatives tell ranchers that they, as individuals, are the last ones to stand in the way of power line construction--but apparently the same story is told to all the ranchers to get them to sign up for giving rights-of-way. Some informants suggested that Montana Power would try anything to put pressure on them and on others like them to get its own way. As will be pointed out at the end of this part, given the kind of situation that the landowners find themselves in they have an understandable tendency to engage in scapegoating behavior, Montana Power being a convenient, plausible, and favored target for such conduct.

are not at all likely to react as normal persons do. Corporations, these informants say, are amoral, cold-blooded, and so profit-oriented that they feel no loyalty or obligation to their country, to mankind, or to anybody but themselves for the most part. Many of those interviewed recalled how good a corporation Northern Pacific was and, remembering that, made the mistake of thinking that mining and coal corporations were just as good.⁵ This favorable attitude gave coal and mining corporations a great advantage which they promptly took, these persons lamented.

Valuing credibility, trust, and honesty, the ranchers find themselves greatly handicapped in their situation of not being able to trust and believe most who seek to do coal-related business with them. It is most difficult for ranchers to shed these values and to adopt the industry-wise ones needed to defend themselves in this situation. Ranchers still tend to use values and related behavioral assumptions which they developed through less stressful, "live and let live" circumstances, even now when the situation is full of conflict. Ranchers find that these value differences make for much anxiety, uncertainty, and difficulty in dealing with corporation tactics.

⁵It was reported that while Northern Pacific used to be trusted, its successor, Burlington Northern, was unable to carry on this tradition of trust for very long. Although not universal, the present negative attitude toward Burlington Northern stems primarily from the fact that the company has acted high-handedly to put pressure on ranchers not to complain about the activities of coal companies. Pressures have been brought to bear by threatening to withdraw the leases of dissident ranchers leasing land from the railroad.

One of the favorite tricks of companies is to send surveyors out to start working without first asking for the appropriate permission. If they happen to get caught and are asked to leave, the surveyors simply get out. In the meantime they probably manage to get done a good bit of what they were sent there to do, without securing the proper authorization or even attempting to do so. Oftentimes, informants suspect, the surveyors are able to go in and out without ever being noticed because the land holdings are so vast that the landowners are not apt to discover them.

Another favorite ploy of companies frequently noted by interviewees is to get a big head start in construction work before getting formal permission to do so. The companies then argue that the heavy commitment they have made should be approved via permission to go ahead and mine coal or to construct power lines. Securing approval for a reservoir (for recreational, aesthetic, agricultural, and . . . [oh, yes] industrial purposes) appears to be a ploy for obtaining permission to establish a gasification plant. Some ranchers believe that coal companies establish inroads, beachheads, and the like by buying or leasing key places and then developing scare rumors and pincer movements to lop off large chunks of land for development. Locals naturally resent the employment of devious tactics.

Informants related what a terrifying experience it is to receive a land condemnation notice out of the blue. The question was raised as to whether such notices were being used to scare

hostile ranchers into giving up the fight against coal development. Upon receipt of such a notice, one has to hire lawyers and spend a lot of time and money to try to defend what has legally and rightfully been one's own land all one's life. Another scare measure which has reportedly been used extensively in companies' attempts to acquire land involves pointing out to a rancher what will happen to him if a neighbor decides to lease. He is then encouraged to go along with what his neighbor is presumably about to do. Another tactic which is in constant use is continually talking in terms of when various developments occur rather than if, a practice noticed by both informants and researchers. Locals note that this usage tends to make them feel powerless and at the mercy of uncontrollable external forces.

Ranchers are keenly aware of the tremendous power--both financial and political--held by the industrialists, who are in a position to stifle a productive ranching operation virtually overnight. For example, progressive ranchers are those who continually expand their holdings in order to continue operating at acceptable profit levels. Those who want to expand their ranches anticipate trouble in acquiring more land because they believe the coal companies can always offer more money for acreage which becomes available. At the same time it is also doubtful that any outsider interested in buying land for farming or ranching purposes would do so in this area, knowing of the press for coal development and the ramifications such industry brings; hence these ranchers feel a squeeze at both ends: they cannot

reasonably expect to acquire more land for their own needs no matter how much money they have (and a replacement ranch is very difficult to find), nor can they expect another rancher or farmer to wish or be able to buy from them in light of the coal competition.⁶ On the other hand, there are others as noted who want to sell or lease to the coal companies. Lack of accord on whether or not to sell or lease has created a strain within some kinship groups, but no such discord or division has been observed by the researchers between ranchers and their wives. All acknowledge that they must reckon with development.

Most ranchers feel that while they might be able to get along with strip mining activities, they cannot see themselves accommodating to mine-mouth electric power generating plants, gasification plants, and the like, all of which appear to be just too destructive to ranching because they bring in so many additional people. Some are saying they can live with what has transpired to date and possibly could live with more in the way of energy development activities but first want to see what the impact is of what has already happened (e.g., the effects of Colstrip's first two plants) before trying to take on more; being cautious about social change, they want sufficient time to adjust to the current state of affairs before further activity occurs.

⁶They could, of course, buy from and sell to fellow ranchers for less than the coal companies are offering if the seller is really committed to a ranching life-style and financially able to accept less money.

Others are resisting even the start of mining for fear that "one thing will lead to another." These persons believe that they are faced with an all-or-none proposition. Ranchers who feel they can accommodate to coal development do not subscribe to such a position. Where one draws the line with respect to how much development he can tolerate depends upon his own ability to imagine an acceptable scope and rate of industrial growth and to recognize the social, personal, and resource requirements entailed.

Aside from the personal and social effects being acknowledged, there is a great deal of concern about the water needs and supply in the coal areas. Ranchers interviewed expressed fear that the rivers will be sucked dry⁷ and that the ground water (suitable for drinking) will get mixed with surface water (often not potable) and therefore become contaminated. Some expressed the concern that if mining occurs on higher ground and disturbs the natural flow of water, meadows will dry up as springs disappear. Construction of power transmission lines and aqueducts also may disturb the springs. While the power companies have offered to drill wells for those whose springs do go dry, this does not constitute a satisfactory

⁷At least one newspaper report has suggested that overall water needs for maximum energy production may at times require as much as two-thirds of the Yellowstone River (Missoulian, 25 October 1973). Water will have to be trapped and stored for gasification plants; most likely trapped spring runoffs will supply the bulk of this need. Such storage will necessitate additional construction which will have an impact of its own.

replacement as wells are both hard and costly to keep up, they do not water meadows, and they are not as dependable a water source as springs are since the latter do not freeze. Informants emphasized that while the law offers money for damaged water supplies, a payment is a totally inadequate substitution for such a vital life source.

At present, the Montana Power Company is in the process of constructing a water transmission pipeline from the Yellowstone River to Colstrip for units #1 and #2, having obtained all needed rights-of-way. Varying tactics, many of which rural informants consider questionable, were used to obtain these agreements. It was reported that the State Highway Department asked the county commissioners to get the ranchers to hold out on giving any further authorizations until the highway widening between Colstrip and Forsyth was settled. Meanwhile the power company asked not to be held up, due to rising costs, scheduling difficulties, and the inconveniences such a delay would cause. Such actions contribute to the uncertainties brought about by an ever-changing situation.

The uncertainties associated with coal development are very upsetting, and locally perceived deception on the part of power and coal companies has created the bulk of the problem. Informants noted that the companies have said they "don't know" when later it was revealed through public declaration or overt action that in fact plans had been made. Dealing with this kind of situation is totally unfamiliar to local ranchers, who have

learned to manage the normal vicissitudes quite well. Even if water sources go undisturbed by coal mining, they and the air may become so polluted by the proposed power plants that cattle raising will be jeopardized. Further, the success of reclamation efforts has yet to be demonstrated to the satisfaction of most informants. A company's announcement that only a small amount of acreage will be disturbed is misleading in that the disturbance can divide a ranch, whether it is due to mining itself or to the installation of power lines or rail spurs. Also, the portion of land to be disturbed could turn out to be located right over a spring. Ranchers cannot control such aspects of coal development and therefore have little or no incentive to improve their ranching operations because they have little or no assurance of any return on their increased investments. On the other hand, failure to improve and expand ranching operations is synonymous with failure to keep up and be competitive. If they knew for sure that development would go only so far and no further, ranchers could make certain commitments and take certain stands. As it is, much of their information is based on rumors rather than on confirmed or official statements.

The many rumors prevalent contribute to the pervasive sense of uncertainty in the area and make life difficult to enjoy. The rumor that pollution abatement equipment will not work as well as expected has created a special worry for ranchers, most of whom do not have a clear understanding of how scrubbers and the like operate and what they do. In addition, power officials

say they are not sure just how much pollution there will be, and this has created more problems for landowners. For example, those who will be downwind of plants worry about the harm their cattle will sustain through exposure to an unknown quantity of contaminants. The uncertainty of utmost concern is the undetermined number of people coming into the area; "people pollution" is feared more than ground, water, or air contamination. Newspaper announcements often feed and substantiate the rumors; others are hard to check out. These uncertainties make all planning difficult, whether they concern expanding one's ranch or business, constructing additional housing, or accommodating a large influx of school-children.⁸

⁸Interviews with construction workers at Colstrip lead the researchers to point out that rootless persons, such as boomers, enjoy the novel experiences and strangeness which are part of being highly itinerant and mobile and have no interest in getting involved in local organizations or affairs or in developing social ties. The rooted are at a great disadvantage in trying to deal with people for whom uncertainties and uncommittedness constitute a way of life.

The researchers' observations suggest that ranchers who see in coal an opportunity to make a lot of money for themselves suddenly begin to become estranged from the local scene in the way that boomers are. These ranchers tend to become inordinately loyal to themselves and act as though they, like boomers, are rootless and therefore not responsible for the effects of their actions on their friends and neighbors. Self-estrangement, temporary though it may be, can function as a way of absolving oneself from feeling responsible for doing something about the social problems one may or does create.

Discussion

Rumors about development and coal developers are rife throughout the study area, an unsurprising occurrence in a situation in which great interest, concern, and anxiety are coupled with a continuing lack of reliable and trustworthy information on the matters in question. The anxiety breeds rumors which add to the anxiety which leads to more rumors, and so on. All this has the effect of keeping the people stirred up, off balance, and very anxious. In this kind of situation, paranoid-like reactions appear to be inevitable. The more threatened one feels, the more one tends to become suspicious and to feel at least socially abused and perhaps persecuted. It is not uncommon for ranchers who oppose coal development to feel that they are part of a persecuted minority group in the United States. Landowners are being made constantly aware of their vulnerabilities and lack of power in dealing with social interventions from the outside world. Until recently, landowners felt in control of their destiny. This feeling is rapidly disappearing, even though ranchers continue to be able to handle normal, recurring stresses and strains well--and to do so collectively as well as individually.

It is therefore not surprising that most ranchers are acting in opposition to coal development; they tend to engage in conflict relationships with the coal industrialists, their representatives, and their advocates. Their ties to the land are strong, and a desire to hold their land in trust for future

generations is fairly prevalent. Ranching constitutes a necessary locus for a desired way of life for most ranchers interviewed, some of whom would not be at all satisfied with a lot of money and/or a big ranch in place of what they currently have. They feel that they are "somebody" (i.e., that they can enjoy a certain desired social status) only if they can remain where they are. Southeastern Montana is a good example of a place whose residents share a culture yet do not constitute a society. The area is actually made up of many small societies; some of these "natural communities" have formed in the face of the coal issue.

The labels "pro-development" and "anti-development" indicate only what one's "druthers" are, not necessarily how one is sure to act toward offers to use one's land for coal development or toward coal-related events which one expects will affect one's land and life-style. That is to say, the correlation between attitudes and actions is always uncertain. Some ranchers who have tried unsatisfactorily to accommodate to coal development and who still tend to favor some form of it are now actively fighting it. Some who oppose it are hedging against an uncertain future by acting accommodatively toward development, for example, by leasing to land developers.

It should be kept in mind that some of the considerable complaining going on about the Montana Power Company is probably normative and is only intensified by recent industrial events. Like other industrial giants in the state, MPC is viewed with a

mixture of admiration and fear. Certainly the company and its subsidiary which runs Colstrip (Western Energy Company) have a side to the story of events about which complaints are being voiced. Some (and perhaps most) of the employees of these firms who are in coal-related jobs are doubtless doing their work conscientiously, expertly, and humanely. However, some who work for MPC are comparatively less humane and considerate of the feelings and wishes of the locals and consequently are instrumental in creating negative images of the company in southeastern Montana. In addition, some of the negative impact of MPC comes more from its objectives than from the actions of some of its field staff. Thus, what the company is constructing at Colstrip--no matter how nice, thoughtful, and considerate its representatives there may be--is in and of itself having a massive negative impact on southeastern Montana. (Likewise, Western Energy's policy of owning Colstrip is making some newcomers feel that they are just too much at the mercy of those who are planning and running the town. These newcomers want more voice in managing the affairs of the community; they want it to be modeled more after a participatory democracy than a fiefdom.)

There is a particular irony in the feeling among the WASP-like anti-development ranchers that they are rapidly becoming a persecuted minority in the wake of coal development. For years they have been considered prototypical rural Americans, the backbone of the country. Now, suddenly, they are being accused of standing in the way of "progress" (i.e., industrialization

of their area). Needless to say, they are in process of undergoing a radical change in status which they find both befuddling and outrageous.

Most (and probably all) ranchers are having a very difficult time imagining the future. Evidently, this job is largely a matter of extrapolating the past and present as part of predicting where perceived trends are going. It should be borne in mind that people problems are much more in ranchers' experience than are other pollution problems associated with coal development. Indeed, such possible problems as air pollution are still considered abstractions for they are simply outside the ranchers' experience.

The prevailing situation for ranchers, as well as for townspeople, newcomers, and old-timers, tends to generate scapegoating behavior. Rightly or wrongly, with or without foundation in fact, scapegoating of MPC, Western Energy, the county commissioners, and other likely targets abounds.

PART III: THE REACTIONS OF TOWNSPEOPLE

Townspeople in the Study Area

There is a good deal of suspicion among the inhabitants of Rosebud County that much of the tax money generated by coal development will be used by the more populous areas of the state. According to one informant, this is no longer a suspicion.

The percent of net proceeds tax paid the county has been reduced, with the balance going into the state general fund. Property taxes are paid and then redistributed on the basis of population for equalized school foundation funding. Consequently, no so-called "impact" money is made available to the affected counties.

Some even think that the larger cities of Montana are pushing for coal development in order to get more tax money out of it--a dollar benefit for which eastern Montana would pay a high social cost. One resident stated:

This suspicion is substantiated by the fact that a reduction to the county's share of the net proceeds tax was passed by the legislature, last year, and that \$136,000 was taken out of the Rosebud County school funds to finance education in Montana's urban communities.

All this has given people in this part of the state the feeling that many other Montanans would like to join out-of-staters in taking advantage of the area. Many informants stated that the coal companies were not being taxed enough or were evading responsible action in this department.¹ One informant commented:

¹For example, some Rosebud County locals have observed that the companies move equipment in and out in such a way that it is not around during a period of time when it could be taxed. Such action suggests that these companies are not carrying their fair share of the tax load and do not intend to. In fact, some informants noted, it appears that they are deliberately seeking ways

Traditionally, legislation in Montana has been written for the benefit of large ventures. This same tradition is still evident in the state's tax structure.

Whether or not sufficient tax money from coal will flow into the county, at least some locals are already enjoying substantial economic benefits.

The Forsyth residents interviewed showed considerable reluctance to examine the nature of their good economic fortune; this reluctance is understandably affecting their ability to plan ahead. Several informants reported perceiving a pervasive sense of greed in the community and a concerted effort on the part of coal and power companies to play up to the latent greediness present in some businessmen and landowners. Some in Forsyth who originally completely welcomed economic development are now beginning to complain of such attendant social costs as a continually overcrowded downtown area. Also, a feeling of fatalism about their future was reported cynically by some area locals because of their view of the power of the big companies, and resignedly by others because "you can't stop progress." For

to avoid doing so. In contrast, a Montana Power executive stated, "We even try to report equipment on railroad cars so that we can pay more taxes to the county."

Another tax concern involves reclamation. Some feel that the cost of reclamation should be separated from rather than tied into net proceeds for tax purposes since by artificially inflating reclamation "costs," net proceeds tax can be greatly reduced; others prefer not to think of reclamation at all, assuming (or hoping) that company plans will bear fruit in due course.

the most part it appears that, whether their current concerns and interests are primarily economic or not, residents are very much oriented to the present, although the ranchers have more interest in preserving the past than do the townspeople because they are more concerned about the possible long-range adverse effects from coal development which could put them out of business.

Few townspeople in Forsyth are upset about development in regard to both what has already happened and what is anticipated in the future. They feel it will benefit most people. One individual who agreed with this view stated that the life-styles of people in Forsyth had not been significantly affected. According to her, people who have been here a long time "feel they have a priority on the place but that will go by the board before long." Another stated:

Most of us would not want our way of life to change very much. If there is a large expansion, it could seriously affect us. The effect so far is not very great.

However, one informant did not like the idea that the local women were being exposed to "foul talk and dirty people who are very noticeable in the bars now"; most local men would agree that the women should be treated as ladies, in or out of taverns.

Commenting on the population influx so far, one townspeople stated that it "has been gradual enough so that it hasn't hit us very hard." However, Forsythians are aware of being urbanized. For example, one said that he used to know everybody within a hundred-mile radius but now knows only about 30 percent of the people in the area. Many of these new people anticipate being

in Forsyth for an extended period. Until additional permanent housing is available at Colstrip, many employees there whose jobs are expected to continue for some time will likely choose to settle in Forsyth; as such, they are believed to make potentially better citizens than the more temporary newcomers, most of whom have been and will continue to be at Colstrip.

With more housing going up at the construction site, builders in Forsyth are naturally hesitant to engage in what they fear may turn out to be an overinvestment in the housing market. It is difficult to anticipate needs of this kind for more than two or three years ahead, by which time present construction activities on Colstrip's units #1 and #2 will be over and a decision will have been made regarding the construction of units #3 and #4. A go-ahead would signal an additional three or four years of economic activity at Forsyth at approximately the present level, but the reaction to uninterrupted development is no longer generally favorable. The businessmen, for example, have indicated a growing desire to have a pause before units #3 and #4 are constructed so that the impact of the first two units can be absorbed and assessed and in order to better determine what additional construction would mean.² One expressed the fear, "Where will development stop?" He also added, "Montana Power needs to be open with people about its plans."

Most agree that while development seems to have resulted in more money being around now, the quality of life for townspeople

²Ranchers have also expressed this desire.

has not become noticeably different. Sympathy for the ranchers' plight was directly expressed: the cost of labor, equipment, and supplies for farms and ranches has risen sharply--putting pressure on landowners who need to expand in order to survive. One middle-aged businessman, a lifelong resident of the area, emphasized that landowners were not as interested in the money they could get from coal as they were in keeping their land and hence their life-style. While land shortages are affecting ranchers and town residents alike, the latter (excluding newcomers) are not nearly so concerned with this aspect of development as they are with the pressures being brought on the schools, the sewer system, and especially the city water supply.

Until the city council moved to deal with the community's water problem a few weeks ago, Forsyth residents were more worried about their city water system than about any other immediate community problem associated with the coal situation. People in town are reportedly still planning to drill more wells to water their lawns in an effort to supplement the inadequate local supply of water available from an outdated system. They evidently believe that the town will have a modern water system only after the present one is definitely replaced. Some are resentful of having to have the new system, needed largely for the sake of the newcomers in town who, according to one informant, "will not be here long enough to pay for it."

The new residents in Colstrip appear to be much less settled than their Forsyth counterparts are. Some persons leave town

because they are too bored here.³ "You can't even find a place to keep a horse." A lot of both single and married men have chosen to commute from Forsyth, where there at least is a bowling alley and a movie theater. Some of the new workers find they are faced with no job security at all--they could be laid off at any time. Out-of-state people feel they have lower priority in this regard than in-state workers have. However, the pay scale and working conditions on these jobs are considered pretty good for the most part. Other immediate concerns, such as getting groceries, are changing as desired stores and facilities get built. Newcomers are quite concerned with the educational opportunities available locally, and several indicated a desire for a more varied school program than what was currently offered. "If school people think of you as temporary, they won't be willing to put themselves out for you."

Other persons are attracted by life in Colstrip. Several interviewed said they liked the town's small size, although one teacher indicated that the move took some adjusting: "It took us a while to learn to shop by the month and not by the day when we moved to Colstrip." One newcomer from Billings, a mother of three young children, commented, "Living here brings a family closer together because you aren't always running off to K-Mart." She and her husband would prefer to live on a small piece of land

³The Mormon church was cited (by a non-Mormon) as the only group which was making a big effort to be helpful to newcomers by welcoming them and providing activities.

and to own their home rather than be in town, but she "put an ad for land in the paper like everyone else does when they come" and got no response. They like working for a small company that cares about its employees. Another newcomer disagreed with them.

They [the company] just walk all over the little man, and we are just white slaves is all. The money is great, but they take it all away from you [through the high cost sustained in living in a one-company job site].

This person's husband, however, pointed out that the good wages (thirteen to fourteen thousand per year for skilled labor), strong unions, and free weekends were some of the attractive features of working in Colstrip.

The housing situation is not one of these features. One rancher who recently talked with residents from each of Colstrip's residential areas observed that the enforced social stratification was resented and that strong animosity concerning it was already building in the community; trailer residents themselves confirmed this observation, with some feeling "labelled" and looked down on because they lived in the temporary area. The class segregation and residential selection process have reportedly created more social strife than they have prevented. Company spokesmen disagree with these informants' observations and interpretations. One stated:

We do not have an executive neighborhood. The distribution of population is based primarily on the date on which new residents arrive. Houses are being constructed continually and as they are completed they are occupied. It is not the intent of Montana Power or Western Energy to segregate the population according to

job titles or work performed. The only division made is that many temporary construction workers live in trailers near the power plant project.⁴

Newcomers and local townspeople were also asked about their views of their ranch neighbors. One local housewife in Colstrip responded by saying that she considered the ranchers a complaining lot: they complain about increased taxes but "mainly because they don't own coal." This informant cited what she believed to be good progress made by those seeking to reclaim stripped land, indicating that she does not share ranchers' concern about the success of reclamation efforts. Because of her husband's good association with Montana Power and the fact that her parents were ranchers in central Montana, one of the newcomers interviewed felt she was in a position to see both sides of the coal issue.

But the ranchers here don't tell both sides. You'd think MPC was stealing their land when they're really getting a lot of money for it. . . . I know from my work experience around the state that there are ranches for sale that they can buy.

Locals in Forsyth were much more sympathetic with the problems landowners reported.

Other informants felt that the ranchers were not really adversely affected by coal-related activities and cited examples. One Billings lawyer working with leases said:

⁴See pages 70-72 for further descriptions of the housing situation.

I've never seen a landowner yet that didn't have another ranch in mind if he can just get money for the one he's on. That's typical.

Ranchers are as happy as can be to let you drill [exploratory] on their land because you agree to let them case the water for wells. . . . We give them fifty dollars a hole and the right to case the water, and they're happy with that arrangement.

He also acknowledged some of the difficulties for both landowners and himself.

Landowners just have to decide whether they can ranch along with mining. If they say they can't, I just go right on down the road and don't bother them. . . . With oil and gas leases you can sign up fifteen a day, but with coal leases you have to live with them. We learned the hard way at Sarpy Creek--don't buy coal leases until you have the surface. In Powder River we have to buy the surface leases first, then wait as long as two years for federal leases and then anybody can go in and bid on it.

His views of the land vary.

I have a ranch and I ran some miners off. I don't want them spoiling my beautiful place. I won't lease for even oil and gas exploration for fear they'll find something. But that's different because that is beautiful land, more desirable than this land we're talking about.

Lawyers' attempts to file for reservoir sites, which involved threatening landowners with condemnation, were reportedly made only because the state had failed in its duty to file for that water; and if no one filed, Wyoming and North Dakota would impound it. The three-year moratorium on industrial use of water from the Yellowstone and its tributaries may give those states a chance to do that. Various informants agreed that Montana should be protected from water rights usurpation by North Dakota and Wyoming and that industry should pay for

water development.⁵ The water rights question is bothering more and more people, including landowners north of the Yellowstone who are out of the coal belt. Few would mind if the companies relied on storing spring run-off water but are not sure that such a source will be sufficient for anticipated industrial needs.

Informants stated that big companies want big coal reserves in order to increase the value of their stock on the market and to have a replacement for other fuel they are losing because of shortages. They are also interested in locating and obtaining the rights to low-sulphur coal. One prominent Billings land broker summed up the crux of the matter by saying: "In three years it [coal development activity] will all be over for us. The coal companies will be located by then." In other words, all leasing and land sales activity will be completed.

According to the land brokers interviewed, coal companies are having difficulty in dealing with landowners because the former cannot understand that offering more money will not automatically resolve any problems in negotiating for leases. The landowner's values must be determined and a lease written that takes these values into account. Because ranchers fear having

⁵One informant stated that the Water Resources Board, which was not allocated the money needed to enforce Montana's 1973 water law, has had hundreds of applications for water under the new law but has no money to publish or otherwise start to work on them. The adjudication procedures need to be carried out stream by stream; and if they are not, this informant believes, the moratorium may really be needed.

to deal with a railroad, coal company, or the federal government, who are considered inaccessible if something goes wrong, land brokers are used as go-betweens. One stated, "We will stand in your [rancher's] shoes, be a buffer, be responsible, be available." However, these informants are also concerned about one company's extended buying rather than leasing in the Decker-Birney area, wondering what will happen to an area where a big industry owns so much land. They report that a great deal of money is being offered to the ranchers here so that the coal company will be in a stronger position to negotiate with a large ranching business that borders these ranches.

In spite of their expressed concern for the landowners, the land brokers stated that they had sold the companies on their singular ability to package coal-rich ranch land into economically attractive, strip-minable units and were capitalizing on the companies' need for people who understood both the legal aspects of coal development and the uncertainties felt by area residents. They indicated that they did considerable lobbying at both the state and federal level to try to influence policy and that if the federal government would establish a leasing policy it would minimize the economic pressures and gambles for everyone. Various policies were cited as needed and concerned whether or not to allow mining without the landowner's permission; whether or not legal title to surface rights is needed or just a bond for anticipated damage; when federal coal will be leased; and whether or not the government can or will restrict development of power generating complexes, gasification plants, and other industry.

Although mine-mouth generating plants would mean more mining contracts and thus more secure employment for miners, the people pollution problem which would be created thereby has prompted informants in this group to feel that it is more desirable to process the coal elsewhere than locally. Even the present activity has not been wholeheartedly received for this reason.⁶ These townspeople would prefer that industrialization be kept on a relatively small scale even though, like construction workers, they are subject to irregular layoffs when coal contracts begin and end and their salaries are good, with many drawing overtime pay. As a group, they generally believe mined land can be reclaimed--although some are cynical about the claims made by the companies.

The reclamation issue notwithstanding, one informant, a county official, believes that it is the landowners who have nothing to sell who find it hard to feel good about the industrialists. This person has little sympathy for the landowners and thinks they are overly possessive about their property. He also feels that the quality of newcomers, overall, has been good. Few complaints have been formally voiced to Rosebud County

⁶Miners say this is not as nice a place in which to live as it was when they first came here because of the construction workers who have arrived. Miners do not want too many people around, and they do not like the kinds of people who are moving in. Because a number of miners are Mormons and are thus non-drinkers and heavily family and church oriented, they have little in common with construction workers who normally do not abstain or who have had to leave their families behind.

officials about the Montana Power Company; but the possibility of condemning land for power transmission line rights-of-way and reservoirs has added to an abounding insecurity and uncertainty, which bother most people in the study area, including Indians.

Except for the sections in the northeastern part of the reservation which are owned by the Burlington Northern railroad, the Northern Cheyenne tribe owns all the mineral rights to coal on its reservation. Three Indian informants observed that Indian landowners feel they are not adequately represented on the tribal council, and the Northern Cheyenne Landowners' Association was organized to look after surface owners' interests. When ranchers here disagree on coal, their interpersonal problem is great because they are much closer to each other both physically and socially than are ranchers in the adjoining Decker-Birney area. The traditionalists are against tearing up the ground, and it is the younger and older tribal members who tend to be in this group. The more acculturated Cheyennes tend to favor development. Some feel they should mine the coal themselves. Those who would say, "Let's let them mine the coal," are not vocal and reportedly are probably in the minority. Speaking for many, one informant said resignedly that mining would be done here despite the general feelings against it because the external pressures to mine were enormous--"So what's the use of fighting it?"

Some informants recognize that what happens in the Decker-Birney area will affect the reservation and that what happens

on the reservation will likewise affect the surrounding area. Two persons indicated that the tribal council should modernize and that the tribal government needs to become more functional and responsive to the needs of the people, especially now that industrialization seems imminent. Because everyone is related to everyone else here and there are so many political factions on the reservation, these informants felt that the very process of doing social impact research here would probably do more harm than good. However, the tribal officials contacted believe it is likely that the tribe will soon have to intensify its efforts to obtain needed social impact data.

Discussion

Some construction workers, visiting bureaucrats, newspapermen, and others who are passing through Colstrip are acting much like tourists in the sense that they are definitely in but not of the place; they look at the locals as "natives" and make no serious effort to get to know them or to be known by them other than categorically. In these and in other respects they act like they are on a journey or trip rather than seriously attempting to understand the locals' culture and/or to try it out. "Boomers" (i.e., construction workers who drift in and out at their own pleasure) are the extreme case of those at Colstrip who act like tourists, except that boomers are much more exploitive and contemptuous of locals than actual tourists are apt to be. It is not surprising, therefore, that Forsyth's locals are inclined

to view new residents (most of whom work at Colstrip) as transients: people who are just passing through. The locals are presently disposed to continue with established roles, relationships, and activities and to avoid exploring friendships with newcomers.⁷

Regarding development itself, Forsyth's locals are not having deep, searching second thoughts about coal-related industrialization, but "minor annoyances" are beginning to be perceived by some Forsythians as more than they bargained for when they got on the side of development. Merchants in particular have started to question the desirability of continued development.⁸ Townspeople are quite aware of the landowners' plight and are more in sympathy with ranchers than most of the latter realize.

As for the newcomers at Colstrip, the husband's job is put first: it is the main independent variable in their lives. Only in this sense are they not family oriented. Many feel that their families are closer together than ever before because there is so little for them to do here but associate with each other.⁹ They

⁷In Colstrip and Forsyth, a "new person" is one who has resided there for less than one and a half or two years. It takes rather longer to lose one's "new person" identity in Gillette, Wyoming, a comparable community.

⁸In contrast, almost all the merchants at Ashland, a small town located in the southern part of the county, are (or were) ranchers and have opposed development from the start.

⁹Living in a temporary trailer area may tend to make strong family ties stronger and weak ones weaker.

have few opportunities to do what they really want to, despite the various offerings provided by the several voluntary associations which have sprung up. As a result, going for one's mail is still a big daily event at Colstrip.

Newcomers and temporary residents have particular problems. The lack of a sense of community among them has impeded their developing a good communication network, which in turn would help foster a sense of belonging. Also, it is difficult for them to put down social roots when, for example, they are labeled as transients by being put in a temporary trailer area, even if they want to settle in. Locals keep newcomers in temporary living areas and otherwise keep them at arm's length socially, perpetuating the newcomers' feeling that they are and will continue to be in but not of the local scene. After a couple of years, miners and their wives who really work at it can begin to gain acceptance as locals. It remains to be seen whether construction personnel who are at Colstrip that long or longer and who work at putting down social roots will be able to achieve the status of "local" or something akin thereto.

Newcomers frequently have little or no idea of how the work they are doing (e.g., building an electric power plant) affects the locals. They are socially so distant from the locals that they sometimes remain unaware of how they and their work impact the permanent residents of the area. Also, newcomers who are temporarily working at Colstrip tend to feel morally unconcerned about the possible effects on the locals of what the newcomers have come there to do.

At the other extreme are construction workers who are former farmers or ranchers or sons thereof and who had to find other work because the farm or ranch business failed or because the business had no place for them. It is evident that some of these workers are keenly aware of their impact on rural locals. Around Colstrip, for example, most rural locals are the survivors of years of gradual expansion of ranches often made possible because smaller ranchers (like these construction workers or their fathers) could not make a go of it. These construction workers appear to be jealous of the continuing ability of the bigger ranch operators to survive and indeed flourish. One can easily sense that these workers are quite aware of the impact of coal development on the big ranchers around Colstrip and that the workers would take a certain pleasure in seeing the successful ranchers "get it" from industry just as they or their fathers "got it" from the bigger ranchers years ago. As one worker observed: "The little ones got gobbled up by the big ones and now the big ones are getting gobbled up by the bigger ones. Life's like that."

It is curious that, like environmentalists, strongly anti-development ranchers are called radicals. These so-called radicals are actually traditionalists and/or conservationists who want to maintain the status quo or to return to the status quo ante. Perhaps because they (i.e., the so-called radicals) dare to try to do what others view as standing in the way of progress, the others perceive them as "radicals," people who

are trying to interfere with the "natural evolution of things"-- which happens to coincide with what the others want to take place.

One way to view the general impact of development is through the concept of impact gradients. For example, if one draws a series of concentric circles around Colstrip until Billings is included, one can graphically show that the zone around Colstrip is receiving the greatest social impact from MPC power plant construction, the zone around Forsyth (36 miles away) the next greatest impact, the zone around Miles City (about 80 miles away) still less impact, and the zone around Billings (about 125 miles away) the least impact (Billings is making money off of Colstrip, to be sure, but other coal-related impact on the city is negligible). This scheme applies only to towns; impact on the rural areas which have coal is great and widespread. Throughout the study area, however, there is a general feeling of inevitably concerning the industrialization of coal resources.

Places like Forsyth are woefully unprepared to deal with rapid and widespread growth. They need help per se, and they need help in learning how to assess their needs and use help in meeting them. The question remains, what are/should be the responsibilities of government and industry in providing such help?

PART IV: SOCIAL EFFECTS AND OTHER CHANGES ATTRIBUTED TO INDUSTRIAL DEVELOPMENTS

Social Effects and the Social Structure

The social effects occurring as a result of coal development are particularly visible in the schools, with unprecedented pressures being felt at Colstrip.¹ The former (reportedly non-racial) rivalry between Indian and white children at Colstrip's school is now giving way to a coalition of these two groups against the children of the newcomers working in coal-related jobs--workers who now greatly outnumber the locals. On the other hand, one teacher observed that the local students were not noticeably affected by the new ones and that life seemed to be going on as before; and an administrator felt that the newcomers mixed in quite well with the others. The split classes deemed necessary to reduce class size have separated friends of long-standing; and until recently there was fear that a split shift would be required which would emphasize the local-newcomer gap still further, with the children of farmers and ranchers riding the bus together to school for instruction during one part of the day while the children of the construction workers and miners walk together for classes during the other half. The new school

¹The increase in enrollment is expected to go from less than 300 students as of last year (see table 5, Appendix B) to 1,800 in the near future, when construction activity is at its peak (see Billings Gazette, 17 March 1974).

hours would have created hardships for many and given some children too much time with not enough to do.² Some of the established residents are already discouraging their youngsters from associating with the sons and daughters of newcomers any more than is necessary, and in the views of parents and teachers local girls who date construction boys often find that their old friends distastefully regard them as fraternizing with the out-group. It was hypothesized that the differences which are becoming increasingly evident at school will bring out similar differences in the parents or in the community, with the younger generation more able to adjust to the strains created and more accepting of change and new friends of various social strata.³

The pride once felt about the Colstrip school, which has always been the focal point and center of activity in this community, and about its tradition of quality is waning as newcomers come and go. Locals fear that the overcrowding and the athletically

²A public meeting concerning industrial revenue bonds was held in Forsyth on March 21, 1974; and the president of Montana Power took the occasion to announce that his company would assist in helping the school district provide several additional temporary classrooms needed to avoid split shifts. One company official interviewed believes that the company will provide eight classrooms, an administration office, and lavatories, all in one building (to be ready for occupancy this fall). This building will connect with classrooms recently constructed at the school and will be a part of the school for as long as is needed.

³A group of high school students is planning a Big Brother-Big Sister program for next year to help newcomers. One person in this group, himself a newcomer, stated that he tried to meet the new students because he felt he had something in common with them: "I've moved around all my life."

(more than academically) oriented children of the newcomers are affecting, i.e., lowering, the quality of education offered. Teachers' relationships with students are reportedly not as satisfactory as they were when classes were smaller. The assumptions and values of the locals are being questioned by the newcomers, and teachers share the sense of uncertainty and insecurity felt by the ranchers' children. School personnel are faced with the impossible task of trying to predict just how rapid school growth will be.⁴ Some ranchers fear that they will be voted off the school board and that the newcomers will then increase the bonded indebtedness, which the ranchers and other landowners would have to pay (the last school election, however, did not change the proportion of ranchers on the school board). Further, newcomers who are not yet paying taxes to help support the school system have already made various demands on its facilities for recreational and religious instructional purposes, and these requests have both puzzled and annoyed the locals.

⁴State school figures indicate that enrollment increased 26 percent in Colstrip and 12 percent in Forsyth in the past year (see table 5, Appendix B, for the actual numbers of students). The teaching staff in Colstrip has doubled (from thirteen to twenty-six) during this same period of time (and twenty-two more teachers are expected this fall). The overall percentage increase in school enrollment for Rosebud County was 12 percent (see table 6, Appendix B). Enrollment figures for Rosebud County and surrounding counties for the past several school years are presented in tables 2 and 3, Appendix B. According to the school personnel interviewed, the additional enrollment is not adequately financed and its impact will be more noticeable as population increases.

For the most part, Colstrip High School still offers little aside from a college preparatory course, although the planned addition will make it possible to expand language instruction and to add shop instruction and adult education. One teacher pointed out that it was hard for new students to adjust to a new school program and that most of them just coasted along, knowing they would not be here very long. Many of the students have been so transient that they have never gone out for sports nor taken part in extracurricular activities. Students from town, especially newcomers, have a great deal of time on their hands since they have apparently little homework, no farm or ranch chores demanding attention, and no opportunity for part-time employment. With the exception of involvement in group activities such as Scouts, 4-H, Rainbow, Teen Club, or Little League, which parents help chaperone, there is very little for young people to do in town and few places for them to go; in this respect their situation is similar to that of many construction workers' wives, who pass the time by watching television a good deal and evidently overeating (there is a large, active, Weight Watchers group in Colstrip).

Forsyth has approximately twice the number of schoolchildren as does Colstrip (table 5, Appendix B). The community has three school buildings, one each for the elementary, junior high, and high school grades. Classes are larger than before development, and a shortage of teachers and supplies was noted.⁵ One teacher

⁵Colstrip does not share the teacher shortage. It was reported that the school offers a high base salary and good

reported perceiving no major problems between new and old students. Another stated that the transient children were "more aware and worldly" and that it was more a matter of cowboys versus longhairs than old versus new. New students reported that it was easy to make friends but that there was little for them to do in town except bowl or go to the show or drive-in. A high school sophomore, whose parents were locals, stated that she did not find the newcomers particularly noticeable. One teacher observed that the new students were not inclined to apply themselves, knowing they would be changing schools before long; and an administrator said that the high schoolers were taking advantage of new teachers and presenting a discipline problem in many cases.⁶

No drug crisis in either Forsyth or Colstrip is evident to date, although some parents have expressed more concern about this possibility than about the use of alcohol, which knowledgeable informants believe is far more prevalent than drug abuse. Teachers in both towns noted that more marijuana was being smoked, but probably proportionately a lot less than in the bigger schools

fringe benefits (although miners and construction workers are believed to be getting substantially more) and that many teachers apply to work there.

⁶Following a practice common to quite a few school systems in the state, many teachers here have been let go at the end of their third year in order to keep the average salary level down; consequently, the turnover rate has been high. As a result, a high percentage of the staff is composed of first-year teachers. Discipline problems were also reported in Colstrip and were observed to be greater with many new students.

of the state. Both teachers and students report that there are generally more drugs around now and that usage has become more of a problem than it was earlier. Further study will be necessary before the actual dimensions of alcohol and drug use can be specified. Meanwhile, it should be noted that there is a growing concern among keen observers of the local scene about the apparently increasing tendency of youngsters to experiment with marijuana along with alcohol.

Although the incidence of county-wide illegal drug usage has been minor so far, a big increase has occurred in the number of assaults in Forsyth and in the county as a whole. One well-informed officer estimated an increase as high as 50 percent in the number of arrests, with many disturbances reported. A city official noted an increase not only in the number of brawls in local bars but also in the number of domestic problems and in the number of child custody cases--but these increases have not been as big as had been anticipated. While legal problems in Colstrip have not yet generated much business for private law offices, violations of the law, such as disturbing the peace, have become increasingly common. Because the population influx has been accompanied by an undesirable element, which is widely considered to be involved in if not the source of most disturbances, the sheriff's staff has had to expand in the interest of maintaining order.

Social effects are also being revealed through the churches in the study area. The various denominations in Forsyth have

grown substantially. A similar increase has also occurred in Lane Deer, a small community south of Colstrip. Surprisingly, the two churches in Colstrip (one nondenominational, the other Roman Catholic) did not grow significantly until this spring. A Lutheran one is in process of being built (an offshoot from the Protestant church there). While the significance of the specific seeking and selection of preferred religious affiliations requires further study, the newcomers' "class consciousness" has become visible through their definite church preferences. For example, most of Colstrip's Protestant newcomers who are churchgoers evidently would rather travel a considerable distance to attend the church of their choice--which is apt to be associated with a particular stratum⁷--than to participate in the nondenomination services available locally. Overt and obvious social stratification is new to Colstrip, where the tendency has been to gloss over and minimize social differences within the established structure.⁸

Because most of the preboom citizens of Forsyth are long-term residents and many are related to each other, their existing

⁷N. J. Demerath, III, Social Class in American Protestantism (Chicago: Rand McNally & Co., 1965), p. 2.

⁸Stratification at Colstrip is a self-conscious experience in which people seek to classify themselves in relation to others and to place everybody in social positions which are defined in terms of such evolving characteristics as length of residence, type of job, economic status, and position on the coal development issue. Presence or absence of social roots was also reported as a major placement factor.

social system--composed exclusively of long-term neighbors, friends, and relatives--is well established and not geared to recruiting new members. Semiformal groups are of longstanding in this established trade center, and social activities often cut across generational lines. When coal development took hold, there was an intensification of relationships already established in an effort to keep one's distance from what was happening and from the newcomers suddenly on the scene. Locals, while curious about the newcomers, were not especially eager to meet them or to mix with them socially--and vice versa--because of their differing interests and values. The social impact created by coal development and the influx of newcomers is variously affecting different groups of locals.

Housewives in Forsyth find that shopping is less pleasurable now because the stores are more crowded and there are so many unfamiliar faces, but they also acknowledge that newcomers are bringing more money into the community and in many instances their husbands are now earning more. Newcomers are not threatening to integrate established neighborhoods because mobile homes, the only residences available to newcomers, are pretty much confined to the outskirts of town. Thus, for local housewives in Forsyth coal is not a big topic of concern; it is neither drastically nor directly adversely affecting their lives or lifestyles. A Colstrip counterpart summed it up by saying, "Life is pretty much as it has been--same old friends [and social circles]."

As far as the merchants are concerned, coal development has brought the town alive. Business is good and they are doing well, whereas formerly they managed to "get by." They have become self-conscious of their stores' images and are thinking of expanding. Many are reluctant to go ahead and expand or to carry much more inventory than they have now for fear that the present boom will last only as long as the construction at Colstrip takes. Besides, they are doing very nicely now--so why take on an extra risk? As such, coal development has not created much of a change in their lives other than that they are busier and working harder than they did before. It admittedly has made labor more expensive but, with income substantially up, there really is no problem in meeting this increased cost. Coal development has not been a big issue for this group.

Presently, however, the merchants are having second thoughts about the prospect of continuing development. They are leery of supporting the construction of the third and fourth generating plants at Colstrip for fear that such activity would bring in another bank, another hardware store, more grocery stores, and the like, which would mean more work and competition for present owners but not necessarily more money. Also, there would be more people around and thus more social problems. Merchants have also become more aware of their real source of income (the landowners) and are trying to patch up strained relationships with these customers, who might choose to do business with the new stores after the construction period is over and thus leave

the established stores high and dry. There is a growing reluctance to be dependent on the continual presence of a large, temporary labor force; and the recent several-week strike at Colstrip has intensified merchants' awareness of the problems they could be facing as a result of more industrial activity.

People on fixed incomes--the aged (given its size, there are a lot of single retired men in Forsyth), local government employees, and those whose salaries are not rising fast enough to keep up with the increasing costs of goods and services--are suffering from the economic boom. Also, those wishing to retire from ranching cannot do so in Forsyth because there simply is no place for them to live here. How many there are in these categories and how many have had to leave town because they could no longer make ends meet are areas for further research, but the number of persons involved is generally believed to be relatively small. Coal development has certainly had an unpleasant economic impact on these groups and is already threatening to socially uproot a few people, but locals feel that so far the life-styles of these persons has not been significantly affected.⁹

With the exception of the office of the sheriff, almost all of the offices housed in the county courthouse and at city hall find that coal development has not really changed the pace of work, although one city official said that it was taking a lot

⁹To what extent the economic hardships being experienced can be attributed to nationwide inflation as opposed to coal development is outside the scope of the present research.

of his time and was requiring him to add more staff. For the most part the services these departments and agencies offer have not felt any great pressures related to development. For example, the number of welfare cases has not increased in Forsyth.¹⁰

A critical problem faces the medical services organizations, however, which have always been understaffed. The two physicians and one dentist who have been in town for years have not been able to handle the increased caseload; but the third general practitioner who just arrived (in May of this year) will help ease the pressure. It was reported that a big increase has occurred in the number of cases of venereal disease and that many of the new schoolchildren lack immunization records, complicating health care. Health care personnel are overly busy to the point of being harried and have had considerable difficulty recruiting needed additional colleagues. One lawyer, however, stated that law practice in town had not increased all that much. A shortage of other kinds of skilled personnel, such as plumbers, was also noted as a consequence of growth. Coal development is thus affecting these groups of informants in different ways.

While locals and newcomers meet at church, the bowling alley, the movie theater, and in offices and stores, it was reported that they do not mix very much socially because of their differing

¹⁰County welfare data for a variety of assistance categories are presented in tables 4 and 6, Appendix B. Some fluctuations are evident over the past few years. Most noticeable is the increase in the number of households receiving food stamps.

interests, commitments, and values. Some do go to the country club, play bridge with locals, and attend square dances; but for the most part these activities are not widespread among newcomers. Miners who have been in town for two or three years and expect to remain have adopted the local values. These newcomers are an exception and have been accepted by the established residents.¹¹ Local railroad workers view coal development favorably because it has also brought them the promise of job security, and it is likely that the younger railroaders with little seniority will experience few layoffs in the foreseeable future. Construction workers are not apt to have such futures, however.

There are, in one sense, two different kinds of construction workers at Colstrip: those sent by their unions and those who freely chose to go there (career itinerants). The latter are neither boomers nor local workers (persons whose home base is Billings or a small town in the area). Construction employees fall into several groups, but insufficient data have been gathered to date to permit a discussion of the various types represented. Various workers come with their families; others do not. Those whose homes are in towns reasonably close to the construction site generally leave their families behind. As a group, these workers socialize with old-timers more so than they do with miners.

¹¹Miners and other informants who know such persons say that miners who have been in the area for one and a half to two years are viewed as old-timers, but construction workers of this same standing are still considered newcomers.

With the exception of Colstrip's new "core residents," who, knowing that they will be here for an extended period, are putting down roots and are socializing among themselves more so than are their fellow newcomers, social life for the most part is characterized by frustration and boredom. Those used to being outside or even making or repairing things at home find their style cramped by trailer court life, which is expensive¹² and affords little space or privacy. With no gardens to tend (Western Energy forbids them because of the water they require), no property to improve, no outdoor work to occupy one's time, and no downtown to visit, Colstrip's trailer occupants find they are reading or watching television more than they did before. There is very little neighboring in the temporary trailer area where most workers live; there is more neighboring in all areas across the tracks, where the atmosphere is more one of permanence, or at least less of that of a work camp. Some in the work camp area may not want to make friends given the short time they expect to be here, and since it is hard to make friends and hard to break friendships these newcomers for the most part stay socially distant.¹³ The situation for newcomers and locals alike is

¹²One informant reported paying over a hundred dollars a month last winter for the propane for his trailer.

¹³The wives of workers are reportedly more sensitive to manual-nonmanual social status categories. The men work together and are not apt to make much of these categories. The women spend a good deal of time organizing and attending Tupperware and other sales parties, craft classes, and other special interest groups that do not depend on long-term social contact.

similar to living in a remote secondary school compound in the back country of East Africa.¹⁴ Residents' coping behavior varies; most people get out of town on weekends, driving to Forsyth, Miles City, or Billings to shop, take in a movie, have dinner out, or otherwise take advantage of the city offerings so many miss or crave.

A lot of people . . . really like to go to Billings or Miles to shop and get haircuts and the like in order to get away from here for a day.

Some informants pointed out, however, that these needs and desires to get away had the effect of making Colstrip an expensive place to live.

Changes Brought by Coal Development

Coal development has wrought a great many changes in the study communities in eastern Montana. In particular, changing relationships among and views of ranch friends are evident. It is difficult to discuss the coal issue frankly, trustingly, and uninhibitedly with those who hold opposing views, positions, or commitments concerning coal development. For some, to even ask another's views is considered an intrusion on his privacy, given the Western tradition of individual independence in personal and business matters. As such, many simply avoid the topic. In the latter case, the researchers have observed that the chances are that each of the friends will make some erroneous assumptions

¹⁴An extended description of this life is available in Raymond L. Gold and F. B. Nelson, "A Teaching Safari: Story of the Teachers for East Africa Project, 1961-1965," unpublished report (New York: Teachers College, Columbia University, 1970).

about how the other thinks, feels, and acts on the coal question and will note that the position he holds is not treated fairly in news reports or public forums. As coal-related matters grow increasingly difficult to discuss with friends presumed to hold opposing views, relationships tend to become increasingly strained with the continued avoidance of an issue of such paramount and mutual importance.¹⁵ At this point interaction in the relationship is very self-conscious in ways it never was before. It should be noted, however, that it has recently become easier to discuss the coal issue, after those concerned began to realize that avoiding such discussion with neighbors left everyone feeling emotionally isolated and politically powerless. The collectively perceived need to get together to do something about the issue is beginning to supplant the collective inclination to face it alone.

Other aspects of change are apparent. A shift in power from the ranchers to the new mining industrialists is very evident. Ranchers interviewed noted that their favored position

¹⁵Various groups have formed in the face of energy development activities, and strains in the relationships of these as well as of other coal-related organizations and their members are also emerging. In spite of the difficulties, organizations such as the Northern Plains Resource Council and the Tri-County Ranchers Association have brought together people who have diverse political and environmental leanings and are helping them deal with various coal-related problems. The newly formed Rosebud Protective Association, composed mostly of ranchers, serves the area north of the Northern Cheyenne Reservation. Its members (almost fifty) are interested in protecting their way of life and want a voice in the decisions and management of coal-related matters. The researchers have learned of no formal pro-development organizations of landowners and other residents in the study area.

of the past was being upset or taken over and resented their loss of status; others reported feeling that the ranchers had enjoyed too much status. In particular, ranchers in the past had a lot of voting power and prestige and a good relationship with the county commissioners. Now the ranchers feel they hardly know their commissioners; the latter have seemingly withdrawn from their ranch constituents, and no longer do the two talk about the same things.¹⁶ Some ranchers noted that the commissioners no longer smiled because the pressures and strains accruing from coal-related developments had been "getting them down." Others interviewed indicated that they felt the county commissioners ought to be replaced with persons more capable of dealing with coal development, while still others expressed suspicions that the commissioners were being hoodwinked by Montana Power or were being unduly influenced by high level, pro-development state politicians. Ranchers realize a need to represent themselves actively now, not just through voting; organized efforts are needed beyond their traditional, predominantly agrarian activities.

Regarding merchants, whom area ranchers have supported for years, informants note that the businessmen seem to be catering to the power and construction companies, apparently forgetting that they were once (and in large measure really still are)

¹⁶Curtailed communication leads to misperceptions of the views of one's constituents. Representatives cannot be familiar with what the voters think about the coal issue if the topic is systematically avoided, informants remarked.

very dependent on the ranchers for local support. Because of their refusal to help fight coal development, the merchants are more or less resented by the ranchers, with some (to date a small number) going so far as to boycott business in Forsyth altogether. At the same time, however, many ranchers around Colstrip report that they are socializing with the new "coal elites"; they are finding that they have more in common with these newcomers than they do with local businessmen. Also, many merchants are now seeking to renew their friendships with area ranchers; for example, they have indicated an interest in meeting with the Rosebud Protective Association to see if the two groups can work together.

Energy development activities are also affecting ranching operations as well as established personal and business relationships. For example, it is difficult to find ranch help now and, as stated earlier, to maintain normal expansion of one's holdings. Also, many are discovering that less time and money are available for ranching because of the necessity of traveling to meetings related to coal development. Ranchers reported feeling a need to inform themselves of how to look out for their interests, such as water rights, and of how to protect themselves and their property in the wake of rapid industrialization. Time spent away from the ranch has a definite impact on its operation. More direct effects brought about by energy development were noted to attend specific activities. An example is the construction of power lines. It is hard or dangerous for landowners to

operate tractors and other equipment near the lines, given the likelihood of getting shocked.¹⁷

In addition to these numerous changes, various pressures have been created by coal development, including the need to expand the schools right away, the lack of time to digest the consequences of present development before more is threatened, the need to make fateful decisions before all the facts are known, the pressure on landowners brought by land brokers, and the financial strain created by suddenly and sharply rising taxes to pay for expansion of school and law enforcement services. Landowners find themselves subsidizing coal development whether they want to or not through a variety of increased taxes. Area locals in general resent the newcomers for this unwelcome burden, which has been imposed for various needs. Commenting on this complaint, one newcomer stated:

The locals resent our not paying taxes. Well, they won't let us have any land to have a house on which to pay taxes!

Landowners see themselves paving the way for a population invasion composed of persons who will absorb them and eventually, in the words of one informant, "kill them."

The residents of Colstrip who have been there for several years or more are finding that the community is no longer theirs;

¹⁷Support for the informants who made these observations can be found in Louise B. Young, Power over People (New York: Oxford University Press, 1973).

it already belongs to others.¹⁸ This formerly quiet, peaceful town is now constantly bombarded with the sound of motorcycles, cars, and other new sources of noise foreign to the local scene. Locals here and at Forsyth are feeling socially uprooted, that is, feeling a loss of their former sense of community as the impact of newcomers becomes more apparent, as old-timers are elbowed out of established positions, and as traditional networks of relationships undergo continual strain and rupture. Miners in particular voiced these feelings. As locals contemplate future changes of greater magnitude and at a faster rate, they become very anxious about being able to manage their lives satisfactorily in the future. Factionalism related to the coal issue has added to the sense of being a stranger in one's own town.¹⁹

In Forsyth, signs of growing urbanization have contributed to the beginnings of feelings of alienation and to a slightly diminished sense of community. Having difficulty in finding a parking place; waiting longer in lines at stores and at the bank;

¹⁸Results of the very recent school board election do not support this perception. A group of newcomers at Colstrip pitted themselves against local candidates and lost badly; apparently most of the newcomers voted for the locals, as did virtually all the long-term residents. When asked about the election, one newcomer stated: "The workers didn't want to get involved in the school election. We are not really part of Colstrip. We just work here."

¹⁹This factionalism is apparently not simply a function of gradually emerging, opposing viewpoints. Several informants noted that various pro-development individuals and one company in particular were working at getting "white ranchers and Indians mad at each other," presumably in hopes of dividing or subduing any anticipated collective opposition.

being busier; paying much more for every good and service; realizing that local facilities, such as the water system, are suddenly inadequate to accommodate a large influx of residents; and having the feeling that it is necessary to lock up prized possessions such as one's home and car, whether living in town or in rural areas, are all related to rapid population growth. Some parents fear that it is now too dangerous for their offspring (or themselves) to go out walking at night, given the presence of many young, lusty, and footless construction workers. Further, all but two of the bars in Forsyth have been "taken over" and, in the view of locals, become crowded and unsafe. They perceive that in most bars they now find themselves subjected to ridicule and the object of provoked fights, and some bar owners are beginning to forbid the rougher elements from coming into their establishments. "The quiet, friendly atmosphere of our favorite bar has temporarily been replaced by a less congenial atmosphere," lamented a Forsyth informant. Increasing numbers of local people are going to Forsyth's country club, "where we have good control of things." Feeling the need to lock up possessions, to keep one's daughters off the street at night, and to avoid favorite taverns are highly symbolic of how locals view the invasion of newcomers. As one informant put it, "Development always brings in a lot of riffraff." People in Forsyth do not yet feel that social impact of development is great, but they are growing more aware of how it could easily become so.

In rural areas around Colstrip, the loss of sense of community has been accompanied by a loss of privacy which has been keenly felt in a number of ways. Ranchers note a continual invasion of private property by newcomers who wander through ranches and then leave gates open or who chase calves with their motorcycles or ride across fields, some of which have been cultivated. Congestion on local roads is repeatedly mentioned, along with the desire to avoid paving them.²⁰ (Newcomers complain that the road between Colstrip and Forsyth is bad.) Many feel that the area is in danger of "Easternization," that is, of being subjected to all the urban problems associated with industry and overcrowding in the larger cities of the nation. Another term used was "Indianization," indicating that the local whites are now being treated in the general, subservient way in which the Indians have been and too often still are treated.

As for the good associated with coal development, a more interesting social life was noted by several adventurous locals in Forsyth and Colstrip because there are new persons to meet and new friendships to make. Also, work opportunities have been provided for those who desire to get out of ranching, or who have already done so, but wish to remain in the area and for ranchers and ranch-hands who are looking for some additional income. Several informants noted that the availability of work locally would encourage many of the young to stay. For rural people

²⁰Unpaved roads discourage nosey tourists and cattle thieves.

there is a certain excitement involved in opposing coal development. A great many ranch wives, most of whom are hearty, outgoing, and self-assured, have spent considerable time reading up on the laws regulating coal extraction and water usage while the men have attended to ranching. Contact with national leaders and interest in the fight have added zest to these locals' lives--but this activity would be much more enjoyable if those against development thought they had a better chance to win.

Discussion

As a result of very evidently being on the wrong side of the tracks, being denied the many residential pleasantries and amenities which are routinely made available to more permanent residents of the town, the people who live in the large, temporary trailer area of Colstrip generally feel that they are being treated as social inferiors simply because they are (in the usual case) subprofessional workers on short-term assignment.²¹ In a sense, they are being made to feel looked down upon and ethnic even though it is they who are doing as much as any other category of residents to make possible the "progress" which coal development is alleged to bring about. Why, they wonder, are they being treated in this manifestly unfair way when they are contributing so much to solving the nation's energy problem?

²¹Lack of desired sites for houses and trailers has been a big problem in and around Colstrip. Those who are to occupy such sites should have significant input into the processes of deciding on and planning them.

One reason for the evident disappointment and frustration of many residents of Colstrip's temporary trailer area is that they expected relationships with fellow residents to be much more personal, and even intimate, than they have turned out to be. It is an especially frustrating situation to the many area residents who have rural backgrounds; they feel hemmed in and caged because there is so little for them to do around the house. They are physically active, doer types who are out of their element in a living area such as the temporary trailer court. Locals' life-styles are also being affected.

A noteworthy impact theme is the acute self-consciousness of the locals concerning all manner of things in their lives about which there had long been unspoken, shared assumptions and other taken-for-granted norms. Changes in traditional relationships with merchants, criteria for socially stratifying people, the concept of one's place in the community, and indeed one's sense of community are examples of matters concerning which locals are feeling newly self-conscious.

While these and other familiar aspects of life are being made to appear strange, there is very little evidence that land-owners are taking advantage of the opportunity to creatively deal with possible interactions between the familiar and the strange. Quite the contrary seems to be the case. Initial reactions to rapid and widespread social change add up to a peculiar kind of helplessness. While definitely able to describe and reflect on their situation, the ranchers have shown little

ability to organize themselves to protect the individual and collective interests they so insightfully identify and explain. Apparently, the traditional readiness of rural neighbors to get together to fight off destructive forces has been replaced by a modern rural inclination for the individual landowner not to get involved personally and directly in his own social salvation until it becomes desperately clear that any other course is almost certain to do him in.

There is no doubt that traditional rural ties are weakening or disappearing from southeastern Montana. Reciprocity between neighbors, feeling morally accountable to neighbors, and the like are on the wane if not already things of the past. The coal crisis is bringing to the surface and to the ranchers' awareness some of the underlying weaknesses and deficiencies in their community relationships, doubtless a significant factor in their present tendency to turn inward and react self-consciously to industrial interventions in their lives. Their growing realization of their vulnerability to these and related interventions is essentially a mass phenomenon: they are experiencing this realization largely as individuals who are not at all certain that their neighbors are experiencing anything like it also. They are even uncertain about where some life-long neighbors really stand on the coal issue, a clear indication that interaction with many neighbors is limited by a surprising reticence to discuss such mutual and fateful concerns. At the same time, however, ranchers in natural rural communities are beginning to

come together once again to establish associations and otherwise to reestablish neighboring as a way of enriching their life-styles while seeking to safeguard them. This "back to gemeinschaft" tendency is so new that its likely effects on the established social system are not yet discernible.

It is evident that the ranchers' social system is so fragile because in a number of respects it is more nominal than real, more alive in the memory of what it used to be than in the actuality of the loose and uncertain social ties which form the basis for claiming that these landowners are members of a community. Although they continue to share a ranching way of life, they are doing so in smaller and smaller groups, much as urban dwellers share their particular way of life. The obvious great reluctance, perhaps inability, of ranchers to effectively band their small family groups together in the face of an enormous, commonly experienced threat to their way of life has the effect of making them easy prey to the industrial intruders. It appears that idealized and fictionalized communities, even when their residents have a common and highly valued culture, are extremely vulnerable to predatory interventions. German Jews found this out in World War II; southeastern Montanans are finding it out now.

The study area has been experiencing interventions in the form of urbanization for some time and has been changing in various respects, some of which are in the urban direction and some of which are not. A big theme is change: the study area evidences rapid, widespread, uncertain, uncontrolled, multifarious

(and often threatening) change. This change consists only partially of urbanization; it would be a mistake to assume that urbanization is presently the dominating change motif.

If serious efforts are to be made to help new and old residents to cope with their emerging situations, themselves, and each other, it would certainly be well to provide such "band aid" help as teaching young wives of construction workers how to manage their domestic affairs in such isolated places as Colstrip and making available counseling and mental health services to the many old and new residents who are caught up in "future shock" impacts. More fundamental and enduring help in coping will require giving both old and new residents more opportunity to have a significant voice in designing and implementing changes which affect their lives.²²

²²The schools may well turn out to be a major area where newcomers will be able to develop a significant voice in local affairs. It should be instructive to follow subsequent school board and other election experiences at Colstrip and Forsyth. It seems likely that newcomers will run again soon and that one or more will be elected.

PART V: A QUESTION OF VALUES

Ranchers' Values and Vulnerabilities

At present, land in the study area which has no strippable coal is less economically attractive than that which does have coal beds lying underneath. However, stripping does create some long-term problems. It entails a sacrifice of recreational values and of future land use possibilities, according to some informants. Many believe that the choice for coal development means there will be less food production both now and in the future, while others feel that some of the land may be more productive following mining and reclamation. Because stripping frequently does extensive damage to the land, concerned ranchers maintain that the cost of this kind of mining should be calculated in terms of the overall long-run effects created rather than solely in terms of the economic feasibility of surface as opposed to underground coal extraction techniques. When mineral rights agreements were originally signed, there was no concept of strip mining and it was assumed that underground mining might be done some day. Many ranchers consider it unfair that this assumption is being ignored. They believe the nation should pay a realistically high price for the coal and should therefore deep mine it, not strip and destroy the land and violate the original agreement between ranchers and the federal government.¹ Others,

¹Some feel that the land above deep-mined coal would fall in an amount equal to the thickness of the mined seam; as such, natural stratification would be maintained. Also, deep mining

considerably fewer in number, view the land only as a means to earning a living; it has no intrinsic and enduring value for them. This group views the land primarily as a business item and is willing to risk its destruction and even put up with people pollution if the price is right.

Outsiders see the land as expendable, and dedicated ranchers sense that these people also look upon them as expendable and place a low value on the Western way of life. The ranch offers freedom, absence of regimentation, isolation, and quiet. Coal development threatens all these as well as the aesthetics of the area. Most of these ranchers feel that a demented value system is being imposed upon them and that their Western hospitality and trust are being violated. For example, newcomers do not have the same respect for the land as do the ranchers, who are more bewildered than angry about the abuses to which their property has already been subjected by the influx of sloppy and careless trespassers. Many newcomers do not understand that a large piece of land is just as private as a fifty-foot lot and act as if these ranches are public property.²

is a slower process and as such is considered more desirable by some informants. The most undesirable feature of this method is that it would bring in even more people than are required for strip mining. However, some informants maintain that there should not be extensive deep mining out here when the vast deposits of low-sulphur, high BTU coal in the East could be deep mined to supply the energy needs of that part of the nation.

²There are a few newcomers who want to earn enough money to be able to live here the way the ranchers do, and some people who came to the area as miners two or three years ago have adopted the local attitudes. These individuals, however,

Aside from having to deal with a great many new people who have a foreign set of values, committed ranchers are beset by a number of other difficult aspects related to coal development--aspects which have put them in a very vulnerable position. First of all, neighboring ranchers are highly interdependent and together comprise a fragile social system which is in danger of collapsing if only one or two ranchers sell out. Commenting on the fragility of the situation, one informant flatly stated:

That sums it all up. . . . We need each other in order to survive. Until this coal business entered our lives, we had been acting as though we were good neighbors but we had actually been drifting apart. Now we have to really be good neighbors again or we are going to be easy pickings for the coal people.

Another informant explained:

Tearing up one's roots to allow rootless people in is not a solitary act. It has a big impact on one's neighbors, on their water, on their ability to live as they wish, and so on. How can anyone justify selling out to industrialists as anything but an antisocial act?

Some pro-development ranchers resent being made to feel that they should give up the money they could make from coal to preserve a neighbor's feelings, sensitivities, and way of life. Secondly, some who have leased land (primarily from federal and state agencies or the Burlington Northern railroad) are now finding that their leases are being taken away on short notice. When leases are withdrawn, competition for replacement land sets

represent a very small portion of the newcomers. Other persons are also interested in preserving the area. In the words of one informant, "When Easterners buy places out here, they tend to be more resistant to industrialization than we old-timers are."

in.³ Ranchers are highly vulnerable not only to such changes in leasing policies and practices but also to water contamination or loss of supply and to the destruction of the highly nutritious, indigenous grasses by surface mining. Thirdly, their taxes are rising due to conditions beyond their control; and they fear a heavy tax burden when the coal boom is over. "We are paying for coal development," and "We are paying for our own destruction," were common observations about the situation. Fourthly, because as a group they are so highly specialized in their work and so deeply attached to the land and committed to their way of life, ranchers find it difficult to adjust to the changes threatened by coal and related energy developments. They feel that they have no say in the decisions being made which so fatefully affect them and that they are powerless to influence what is happening. They are uncertain about so many aspects of what is going on and proposed.⁴

In the face of such ominous and sweeping change, it is obvious to both informants and researchers that ranchers stand to lose everything they have and are. Ranchers realize that they

³Most ranchers depend on leased land for grazing because they do not have enough deeded land to support their livestock.

⁴Ranchers in eastern Montana are still trying to get clarification on patents concerning coal. If they had such clarification, they would not be so vulnerable to the actions of "land grabbers" (self-employed or hired people who reportedly often use questionable methods to acquire land for coal companies).

are unprepared to cope with coal development and hope that the more articulate among their members can do something to stop it. A few have emerged as natural leaders, taking it upon themselves to inform others and to represent them in matters of mutual concern. Some have become models of resistance to development. In this way they have shown how to fight it and have revealed it as less than totally inevitable, but inadequate communication has kept many ranchers from realizing just how much support they have for their views (many report feeling isolated and alone). Being outnumbered by both businessmen and construction workers, ranchers sense that they have the new status of a persecuted minority and are caught in what appears to be a losing battle: the nation's alleged need for coal versus the life-style of a few. Commenting on the general feeling that the industrialization of coal resources is inevitable, a Montana rancher said, "The very best that industrialization can offer is some extra money, which is too bad because, for people like me, land guarantees happiness, dollars don't." In effect, these ranchers are being made to feel guilty for trying to save their lives.⁵

A commitment to a chosen life-style or to one's home ground which takes priority over the money which could be made by selling to coal companies is totally baffling to most industrialists, who cannot understand why anyone would forfeit a sizeable sum of money

⁵The reader is reminded that the authors are speaking for their informants throughout this report. Authors' own comments are confined to the discussion sections except as noted otherwise.

in order to maintain what to them has no particular personal value or appeal. Still, the values of most ranchers in Rosebud County incline them to want to accommodate coal company wishes.⁶ These efforts are continually rebuffed; ranchers run head on into industrial values which are based upon conflict models of behavior and to which they do not subscribe. One informant summed up the situation by commenting, "Isn't that a terrible way to live, not to be able to trust anyone?"

Most Workers, Too, Are Paying a Price

Established landowners are not the only ones who acknowledge paying big social and emotional costs for development. Construction workers in many cases are also paying a high price for their economic benefits. As noted previously, some of the wives watch television much of the day, during which time they tend to consume many snacks;⁷ similarly, many husbands drink and fight too much. Family relationships often leave a great deal to be desired. Many newcomers acknowledge that they are not strongly family oriented because they have had to leave their families behind or because frequent moving has precluded getting too involved in extended family relationships. There is much frustration, boredom,

⁶Those taking an extreme position against development are considered radicals by their fellow residents.

⁷"Everybody gains weight up here in Colstrip because there is nothing to do," according to one newcomer's wife and member of the local Weight Watchers group.

desertion, depression, and divorce reported. Trailers in some cases are overcrowded or unsanitary. Many newcomers said they were hanging on because they wanted to avoid returning to marginal employment situations.

Other strains were noted. One newcomer felt that he and others like him were just as much victims of the situation created by development as local landowners but in different ways, such as being residentially and recreationally deprived. As one person observed, "The park here has no swings or trees-- some park!" The bright blinking lights on the new stack are very annoying to some individuals, and the lack of a shopping center and other facilities at Colstrip are bothersome to the many newcomers who are accustomed to the amenities offered by city life. Many lamented the lack of a choice of anything.

It was reported that a sizeable proportion of workers were saving money "to get out of here" and that it was difficult to develop a sense of feeling at home because

the company makes it very hard for us to do so in the temporary trailer area. They seem to think we are nothing; we just need a pile of rocks to be happy, they feel.

[You] try to get by and forget about it. If [you] think a lot about the living situation it just eats at you.

Further, cultivating friends to visit or shop with is difficult when friends made must soon move away. Thus, it is generally agreed that contacts among newcomers are for the most part superficial and seldom develop into primary, intimate relationships.

Construction workers must put up with the dictates of a one-company town and reportedly do not like to be told what and what not to do. Some rules are met with defiance. For example, when workers were told they could not have gardens (because of the water which they would need), many started hauling both dirt (and water) that night. Several informants suggested that it would be advisable to give Colstrip residents more say about their living and working conditions and a voice in town affairs and planning to ward off the discontent which was already being felt in several ways and causing workers to leave.⁸ At present, however, workers have little choice but to submit to company rules (which many view as arbitrary, unnecessary, short-sighted, or foolish if not infringing on personal rights) or leave.

Company officials are aware that some of the construction workers have been dissatisfied with life at Colstrip and expect a certain amount of turnover. One stated:

Many construction workers do not wish to live in Colstrip or anywhere else the remainder of their lifetimes. We have workers making good money, working every day, leaving every day to work on high-paying jobs in Alaska or elsewhere. Many construction workers who wish to stay will have an opportunity to work in the mines as the labor force there increases.

Miners in the area generally subscribe to the same values as those opposing large-scale (i.e., more than "strip and ship") development. They do not want a lot of people coming in. Even

⁸Several construction worker informants reported that it was widely believed among their fellows that the better workers who leave are usually replaced by people having less skill and who therefore often make for unsafe working companions.

though they acknowledge that their jobs would probably be more secure and their pay higher overall with such increased industrial activity,⁹ they prefer the way of life they had before present construction began. Wives mention (and their husbands agree) that they used to look forward to three-day weekends due to shift changes; now, however, their husbands work six days a week. Miners are thus earning more money because of development, but because there is nothing to spend it on they would rather have the free time they had before.

A few newcomers were very enthusiastic about Colstrip, declaring it to have good weather and an interesting mix of people and to offer good services (viz., church, school, and medical services--the closest of the latter being available at Forsyth until very recently, when the new physician there began holding office hours at the Colstrip first-aid station on Tuesday evenings), whereas comparable construction sites had so much less going for them. Some ranked it low for services offered compared to taxes but did not consider the discrepancy outrageous.

Discussion

Everyone has his social fictions, romanticized versions of reality, and the like; these glosses and embellishments of the "facts" of life help to make life more tolerable, pleasant, and

⁹Labor unions have not been active in the mining scene as yet, although it has been rumored that the United Mine Workers may make their presence felt here. The miners, who are heavy equipment operators, have had little if any experience with mine strikes and their effects.

appealing. Thus, over the years ranchers have come to perceive and talk about their ties to each other as if the ties were those of blood brothers who are strongly committed to living out the Golden Rule when engaging in relationships with neighbors. Coal development has forced to the surface of their perceptions the realization that ties between neighbors are, at bottom, more symbiotic than social. This realization calls to their attention another facet of their vulnerability to developmental interventions.

Noteworthy in the many indications of tolerance limits reported concerning industrial activity is the complete agreement among landowners that "people pollution" is the most destructive force that can be directed against their rural way of life. Given the weakening of neighborly ties, rural community social structure, and the like, it is evident that the traditional "gemeinschaft" type of rural society is being superseded by a much looser form of social organization.

The rancher feels very threatened by the prospect of what he calls "people pollution" because a large influx of people will destroy his and his immediate family's ability to continue being physically isolated and socially distant from others and to remain unchallenged in his attachment to his land. Through this attachment, the rancher maintains a feeling of social solidarity with his forebears. Through improving the land, he encourages his offspring to pick up where he leaves off. In this way, the rancher reaffirms his belief that he is doing right

by the land no less than by its caretakers. The cattle he raises and sells provide him with income needed to fulfill his solemn responsibility to maintain this family-centered, man-land relationship. In southeastern Montana, certainly, that is what ranching is really about.

All ranchers perform a great many functions and play numerous roles because they pertain to ranching, including the role of businessman. "Business oriented ranchers" are those pro-development individuals who are evidently willing to risk becoming morally detached from the natural community of which they have been a member. The willingness to pay big social costs to obtain big money is what there is in common between these ranchers and the many business oriented oil and construction workers in the study area.¹⁰ These workers and ranchers tend to be loyal primarily to themselves, acting to a great extent like "boomers" who justify their way of life by belittling those whose views and traditions are other than their own. There are also many workers who do not share this attitude.

A sizeable proportion of the mine workers at Colstrip who have been on the job for a year and a half or two have begun

¹⁰Reference is made here to the ideal typical businessman, who is strongly inclined to view his work much more as a means to making money than as an intrinsically rewarding and self-fulfilling activity. The ideal typical professional does just the opposite, stressing life-style much more than economics. For a discussion of this kind of distinction, see Everett C. Hughes, The Sociological Eye: Selected Papers (Chicago: Aldine-Atherton, 1971).

to noticeably identify and associate much more with the locals than with the new construction people, whose position is much less permanent. Those who are in this cultural convert group anticipate long-term work opportunities and are taking them and related opportunities to become bona fide members of the local community, that is, they are seeking to establish themselves as locals and are absorbing the local values.

As would be expected, lots of workers are primarily interested simply in getting higher wages in order to acquire material possessions. Most of these are not interested in long-range investments or savings. Some work in order to be able to take time off to hunt. In short, work is a means to various ends for most new employees in the study area, who appear to be largely detached from their jobs and willing to stay on only so long as the money is more attractive than that offered by another project. Such an attitude is totally foreign to most ranchers, especially in Montana where dedication and commitment to one's work virtually absorbs one's whole life.

The present research has led to the discovery of various methods of reacting to impact and otherwise taking impact into or out of account. These behaviors have been created by a variety of categories and groups of study area residents. Knowledge of these methods of dealing with change can be of great practical value to those who are charged with responsibility for making and carrying out the countless decisions which will importantly affect a broad spectrum of area residents. In a

word, knowledge of local values is invaluable for localized planning.

Changes taking place in the life-styles of people in the study area have been described through showing how they are perceiving and finding meaning in what is or seems to be happening as a result of coal-related development. For example, several months ago Forsyth businessmen were certain that they were entering a long period of substantial economic benefit which they predicted they could achieve at minimal social cost. Now they are beginning to really feel the social costs and are less certain that unbridled economic growth is all that it was cracked up to be. They are beginning to seek for ways to have more say in coal developments, realizing increasingly that they really have had very little influence in developmental decision-making processes which significantly affect the character, scope, and security of their businesses.

Ranchers in the area who are good at what they are doing and really find it difficult to imagine doing any other work (this applies to most ranchers in the area) are becoming more politically aware in an effort to have more say in shaping events which importantly affect their ability to function as they feel they must. While becoming more politically astute they are collectivizing their efforts in the traditional "strength through unity" approach to survival. There are definite tendencies to become militant, or at least well organized, as a direct response to the apparently unrelenting interventions of coal industrialists.

Such actions have been slow to develop, since ranchers have always preferred to go it alone in dealing with their problems. However, they are realizing that their coal-related problems are collective, not merely individual, and that they need each other's help in interpreting and doing something about these problems, which are evidently too big and dynamic for them to handle individually, even if they had the time, energy, and money to devote to tackling the problems alone.

It cannot be emphasized too strongly that the great majority of ranchers in the study area simply do not believe that there are no good alternatives to industrializing Western coal resources in order to meet national energy needs and cater to national energy desires. Nor can it be stressed too much that these ranchers are terribly frightened of possible and apparently increasingly likely pernicious effects of this industrialization on the physical, biological, and social aspects of their way of life. They are getting organized to take political action to safeguard what they consider to be an invaluable personal and national resource: the very productive, but very fragile, grazing land which overlays the vast coal deposits coveted by coal industrialists, land speculators, and their ilk. The ranchers feel that they are in grave danger of being overrun by people who are merely using the present national energy shortage as an excuse to (in one rancher's words)

. . . rip up our land in order to rip off the country's coal. There is no good excuse for that kind of destruction and larceny--yes, larceny because they are about to steal the country blind while making everybody think

they are some kind of heroes. And while they foolishly use up this nonrenewable resource for manufacturing electricity and such, they will destroy the productivity of our land for God knows how many decades. The damn fools who think that coal will be a tax bonanza to the county or the state had better ask where the tax money is going to come from after this land is made worthless.

As this eloquent informant noted, the use of Western coal to meet short-run energy requirements is highly questionable. Many other ranchers in the study area would agree, so much so that they are organizing themselves to try to make their concerns and conclusions known to the bureaucrats and politicians who will make land use decisions which will importantly and indeed fatefully affect ranchers (and all other residents of the Northern Great Plains region of the nation).

It is here recommended that funding be provided the present researchers to enable them to process this report with all who may wish to use it to prepare legislation, plans, and other useful actions concerning coal-related social impact in Montana.

PART VI: SUMMARY AND SUGGESTIONS FOR FURTHER RESEARCH

Summary

The purpose of the preceding ethnographic report has been to present the views, thoughts, feelings, and reactions of people living in and around Rosebud County regarding the impact which Colstrip generating plants #3 and #4 are likely to have on the local social patterns and processes, that is, on the residents' way of life. The research method selected for this study does not seek to evaluate why these reported views of and reactions to such coal industrialization are held nor to verify that reported difficulties and situations have statistical substantiation; rather, it is concerned with verifying that what area informants report they believe or feel is consistent with what other locals generally regard as social fact. Ethnographic research is concerned with the issue as informants see it and with presenting an accurate picture using representatives of all known points of view. Validation of the findings reported herein was done using the methods described in Appendix A.

The present report has been based upon more than two hundred interviews with carefully selected informants from Colstrip and Forsyth, Montana, including the Decker-Birney-Ashland area. Interviews were conducted from October 1973 through May 1974 using a sociological sampling approach, which enlists the help of informants in identifying and locating persons locally thought to be good representatives of various groups and points of view

of interest to the research. This report has focused upon the views and reactions of both landowners and townspeople in the study communities and surrounding vicinities. The latter informants represent a variety of occupations and professions, including government officials, merchants, store employees, land brokers, financiers, health professionals, welfare workers, students, educators, laborers, engineers, housewives, clergymen, tribal representatives, law enforcement personnel, senior citizens, newsmen, and lawyers. Aside from the schools, however, the biggest social impact to date has been upon ranchers.

Changes in the way of life of local residents are already taking place. These changes include shifts in the selection of friends, strains in communicating with friends and neighbors of longstanding, the making of social class alignments previously considered unimportant, a shift in the established power structure from the ranchers to the new mining industrialists, the need to live with constant and increased uncertainties for which planning is virtually impossible, a keen interest on the part of some merchants and businessmen in immediate monetary gain, the need to accommodate to the invasion and requirements of newcomers who subscribe to foreign life-styles and value systems, and loss of a sense of community.

Until recently, residents' sense of community had always been good in Colstrip and Forsyth.¹ Now, however, this sense

¹Interdependencies in and among family owned and operated ranches and neighboring have been quite strong.

of community is definitely breaking down, especially in Colstrip where the proportion of newcomers to established residents is greatest. The sudden influx of newcomers throughout the area is affecting every quarter of established town life. Law enforcement, health care services, the churches, and especially the schools are feeling the pressures of increased population. Locals are fearful of rising taxes to pay for the expanding and immediate social needs created by development.² Residents are also experiencing that friends and neighbors need each other less and less as the arrival of various new goods and services is making people less dependent on their neighbors and on being neighborly. It seems evident that coal development will severely threaten the viability of the ranching culture wherever mining (or related energy development activities) occurs because of the strains it creates and the tactics it employs.

Coal and power companies have put landowners in the position of playing unfamiliar roles in an area where little or no industrialization has occurred. Ranchers are poorly prepared to dicker and tend to get taken. They use nonadversarial values in negotiating, whereas companies are playing adversarial roles with great facility. Ranchers, who for the most part view the

²Although there will be considerable tax money forthcoming from the extraction of coal, a lag of two or three years is anticipated before the bulk of this money will be available locally. Even so, some fear that the new demands for increased governmental, educational, and social services may exceed the new monetary supply; thus coal development may not pay its own way after all.

corporations as amoral, cold-blooded, and motivated more by profit than anything else, are at a great disadvantage in dealing with the companies, which have better information, trained and experienced staffs, and an operational ethic suited to treating landowners as exploitable natives. Ranchers have no established information channels in which they can fully trust and believe. Too, ranchers persist in looking at land propositions mainly or entirely in an agricultural rather than industrial frame of reference, putting themselves in a very vulnerable position in negotiations. Companies take advantage of their knowledge that ranchers tend not to discuss land negotiations with each other because the latter are such go-it-aloners, reflecting the Western traditions of not openly passing judgment on how neighbors manage their land and cattle, of not discussing details of personal business matters with each other, and of not imposing one's views on others. Divide-and-conquer tactics, pincer movements, and the like can thus readily be used on ranchers, whose highly successful adaptation to the special demands of raising cattle in the West has left them very vulnerable to industrial or comparable socioeconomic interventions which can be coped with only through being capable of managing tendencies toward massive and rapid life-style changes.

Love of the land is still widespread and evident, and people want to hold on to these ties. Handling leasing or the sale of one's property is often threatening or discouraging for ranchers in southeastern Montana. As a group, they are not

favorably inclined toward development nor desirous of the economic benefits to be gained given the "people pollution" and changes in life-style which would accompany projected, large-scale industrialization.³ As such, it would seem that any further industrial development should be curtailed until the impact of presently authorized activity in the study area is more fully known.

Coal development does not constitute a burning issue for most old-time townspeople interviewed in Forsyth. Either their lives have not been directly affected by it or what ill effects they do anticipate, such as air pollution, are not feared to grow to an intolerable magnitude. For the most part locals are happy with the economic benefits which have accompanied development and do not feel that their way of life has changed all that much--nor is it expected to unless the population influx really becomes huge, which to date it has not. They are concerned about obtaining an adequate number of professionals, particularly physicians and dentists; maintaining a school system whose quality of instruction will not be eroded in the face of rapidly increasing numbers of new students; and safeguarding the area water supply, which is widely feared to be inadequate for meeting projected demands. With the exception of increased prices and taxes, which have created a special hardship for

³It is the researchers' observation that few realize what all-out development really entails. Most in the study area would accept limited strip mining activity.

those on fixed incomes, the social impact on townspeople so far has not been particularly unpalatable. Second thoughts about development are growing, however, with many questioning the desirability of supporting a third and fourth generating plant at Colstrip.

For the most part, newcomers have not been accepted into the established social structure. They and locals tend to stay apart from each other because of their differing values, interests, and commitments. Newcomers who have common interests get together among themselves, and some have managed to make friends with locals and become accepted. Social life for most newcomers at Colstrip is characterized by a great deal of boredom, simply because there is so little for strangers to do in a small town, especially when one has no private land requiring attention. The lack of housing available and of land to buy is widespread throughout the study area, making living conditions difficult for most newcomers, who find themselves with virtually no alternative to crowded trailer parks or camp sites. There is little privacy or neighboring. They are situated like urban tourists in an unfamiliar rural world.

Planning for the overall impact of the generating plants and related coal development has been difficult in most instances because specific projections of future industrial activity and population growth are evidently not available or have not been made public. The Montana towns have little interest in becoming industrialized communities, and only a small number of newcomers

is expected to stay for an extended period of time.⁴ Most of the new residents are presently engaged in construction work which will be of a relatively short duration.

Some informants have noted that power companies nationwide have been quick to ask for increases in rates to offset the recent trend in reduced power consumption, confirming their suspicions that the energy "demands" the companies have been citing as reason to develop Western coal are more created than real and are an excuse to seek more profits rather than to alleviate a true crisis situation. It seems that while the public is being asked to sacrifice and conserve energy, the companies consider that they should be exempted from bearing any part of the hardship, least of all through reduced earnings. Also, because so much of the energy to be generated through coal development will be going to people on the West Coast and in the East and Midwest, it seems as if these people are saying that their desires and values are superior to those of persons whose life-styles are threatened by coal development. There are enormous social costs in process of being paid by the comparatively few people ranching in southeastern Montana. It appears to many informants that residents elsewhere in the nation

⁴It has been reported that the number of workers at Colstrip will drop from 1,500 to 150 when construction ends and plant operation begins (Billings Gazette, 17 March 1974). Of the 83 who will be manning plants #1 and #2, 20 have already arrived (as of April 30, 1974).

consider these costs trivial compared to the social benefits the latter will receive from the energy production activities here. Regardless of the reason, these activities have created a constantly changing situation which has generated pervasive and oppressive feelings of uncertainty and vulnerability throughout the study region; and the effects are being felt in different ways by the many different groups residing in the study communities, each of which has its own distinct problems and concerns in coping with the uncertainties and insecurities associated with rapid industrialization.

The decision to continue to develop the energy resources of southeastern Montana will ultimately be political. Auspitz and Brown write:

Partisan rhetoric does not make the fine distinctions of academia or adhere to the hard quantitative standards of business. But the fact is that the most basic questions of democracy will always be crude and qualitative. They boil down to simple questions of the speed of change, the degree of centralization, the distribution of the tax burden, and the priority of broad national purposes. These questions can be subjected to very sophisticated analyses but ultimately they involve brute choices⁵

It is the authors' intent that the qualitative research presented in this report will assist those who are now and will be involved in decisions which will so fatefully affect this part of the nation, those who are charged with planning for and dealing with

⁵J. L. Auspitz and C. W. Brown, Jr., "What's Wrong with Politics," Harper's Magazine 248, no. 1488 (May 1974): 61.

the multifarious effects of these decisions, and those whose lives and life-styles will be changed as a result of coal-related industrial growth and development.

Suggestions for Further Research

The following are some brief indications of needed research which have been brought to light through the present efforts.

1. Ethnographic research is very useful for studying natural communities or societies but is not as useful when studying such "noncommunities" as the temporary trailer park at Colstrip. The latter are such nonnatural areas (they are merely areas of common residence, not neighborhoods or social units of any sort) that they should be treated as if they were statistical aggregates of the sort which survey researchers create for their own study purposes. Thus, newcomers in such temporary sites need to be contacted through selection procedures ordinarily associated with survey research (i.e., through probability sampling procedures).
2. Ashland, Montana has high growth potential. It would be well to begin intensive studies at and around Ashland soon (before it really begins to change) in order to obtain the highest grade of base-line data.
3. A special study of schools is desirable because they are among the first social organizations to be heavily hit by developmental impact and because the effects of development on them seem to spread far beyond the schools and to last a long time.

4. The researchers have only begun to identify the various groups and subgroups of locals and newcomers. More information is needed on how each of these is being affected by coal-related developments.
5. It would be well to look closely at what happens to such innocent victims of development as the elderly and others who have low, fixed incomes.
6. Special studies are needed of efforts to plan, prepare for, and otherwise cope with actual and anticipated social changes brought about by development.
7. How is the (or a) boom affecting retirement plans and behavior?
8. Very little is known about various categories of people who are not directly involved in coal development but who are attracted by it. They settle in and around towns like Forsyth, sometimes together in small groups and sometimes not. How they live, make their living, and function as part of development impact need to be studied.
9. Scapegoating behavior needs to be examined carefully and extensively. It is a big impact factor and needs more attention.
10. How ranchers and others do/do not manage to organize themselves so as to protect their interests and the like in the face of all manner of perceived threat to style of life should be examined over time.
11. Attention needs to be given to the composition, success, and operation of social organizations formed primarily because of coal development.

12. More data are needed on whether, when, how, and where individuals are willing to step outside the bounds of conformity in order to express divergent viewpoints and engage in divergent actions--viewpoints and actions not in conformity with what friends, neighbors, and relatives think, feel, and expect.
13. Research is needed in areas now facing development but which have had no previous development (Ashland and vicinity, for example).
14. Little is known of the influence of women in the shaping of coal-related events. How does a ranch wife influence her husband's decision to sell or not to sell?
15. More information should be gathered on emerging political groups and political changes as an area's population grows and changes in composition and on how locals feel about construction and coal people once they do arrive in force.
16. If and how expectations for development are met should be investigated. Will the ranching situation change as ranchers think it will? Will coal development actually bring in more business, entertainment, and recreational facilities as expected? How easily integrated into the community will the coal people be?
17. If coal development reaches the magnitude that some are predicting, it should be noted whether or not there is a large-scale movement of ranchers from the study area. It would be edifying to know what happens to such displaced persons as ranchers who sell out to coal developers.

18. The presently reported research has indicated that there are sociocultural and behavioral differences among such social units as natural communities within the study area. It is expected that federal policy concerning coal development will soon be announced. It is also expected that this policy will, in the main, apply without significant area qualification or other local variation to entire regions like the Northern Great Plains. Accordingly, it would be well to investigate what happens to the entire range of affected groups of people in, say, southeastern Montana when their various interests, needs, circumstances, wishes, and the like are treated in this policy, and therefore in and through actual coal development, as though the groups were all passive, receptive, and acquiescent to the land use and coal development policy laid down by the federal government.
19. The present research has identified such construction worker categories as the Bechtel core group (Bechtel Corporation is the primary construction contractor at Colstrip), who are regularly employed by the giant building firm; the personnel who are recruited from inside and outside of Montana for shorter assignments than those given to the Bechtel core group; the employees of various subcontractors; and so on. Construction workers need to be studied more intensively in order to identify the various other categories and social types in order better to accommodate their needs and wishes for living in the vicinity of construction sites.

20. What happens to women, their families, and their communities as more and more local jobs open up to women as men leave these jobs to work for coal-related companies?
21. A special study is needed of the ex-rancher who is being given an opportunity to remain in southeastern Montana by working on or in a coal-related industrial plant. Those who are in this personnel category, often found in building trade unions, tend to ally with big business in both attitude and action vis-a-vis the established locals, especially the ranchers. This curious alliance warrants further attention.
22. It would be useful to take a good look at processes and consequences of the coal-related planning being done by the various agencies and individuals concerned. J.A.
23. There is a remarkable similarity between Montana landowners and residents of the temporary trailer area at Colstrip. Both are experiencing unrelieved anxiety, the growing feeling of being made into ethnics, and attendant emotional problems. This striking similarity between such seemingly different and indeed antithetical social categories should be examined carefully.
24. To the extent that people have control of their lives, their self-fulfilling prophecies tend to be very good data for predicting what will in fact happen to those concerned. Knowing the self-fulfilling prophecies of key decision makers in industry, government, local business, and other pertinent

organizations will provide the ethnographer with information which ipso facto has high predictive value. Accordingly, it would be well to begin filling in a major gap in the present study, which entails gaining access to governmental and industrial organizations involved in coal-related development. Ethnographic study of these organizations and their activities in the study area should begin at once and continue for several years along with studies of the sort which the present researchers have begun. This suggested research would make a needed contribution to one's ability to distinguish between what is likely to be a short-term impact and what is likely to be a long-term one. Since the errors in the presently reported findings are essentially errors of omission, given the elaborate precautions taken to validate these findings, the suggested study of governmental and industrial organizations would probably reduce these errors substantially. Knowledge of self-fulfilling prophecies gained through macroscopic, longitudinal research would have great predictive value.

25. Social impact research on the two Indian reservations (Northern Cheyenne and Crow) should begin at the earliest time acceptable to each of these groups.
26. The social impact of various ways of clustering coal-related industrial plants needs to be studied.
27. More comparative study of natural communities and other social categories must be done in order to facilitate sorting out context-bound from context-free findings.

28. Further research needs to be done on the relationship between attitudes and directly observable behavior in order to better understand and predict when and how it is "more important" to take one or the other into or out of account in the process of developing given coal-related policies, plans, decisions, and the like.

APPENDIX A: METHODOLOGY

Ethnographic Study of Social Impact

The present research study is concerned with determining what difference the Colstrip generating plants and other coal-related developments are making in the lives of residents of the study area, viz., southeastern Montana. While this difference could have been investigated from a variety of viewpoints (e.g., coal company officials', bureaucrats', politicians', urban America's, and so on), the researchers chose to study it from the points of view of the residents of the study area for reasons elaborated below. Having made this decision, the next major research question concerned how these desired points of view could best become known. Max Weber, the famous social scientist "claimed" by anthropologists, sociologists, economists, and political scientists, argued that in order to understand human society the social scientist is obliged to study it without wittingly or unwittingly imposing his own views (or the views of professional, scientific, or religious "authorities," among others) upon whatever process he may use to gather, analyze, and report data.¹ Weber concluded that one could best understand society for what it is (not for what one thinks it might, should, must, will be, etc.) by learning how to study it from the points of view of society's members. Early in the present century, Weber developed a theoretical and methodological rationale for ethnography (a fieldwork method which had been in existence since well back in the nineteenth

¹Max Weber, The Theory of Social and Economic Organization, trans. A. M. Henderson and Talcott Parsons (New York: Oxford University Press, 1947), p. 10. See also Theodore Abel, "The Operation Called Verstehen," American Journal of Sociology, 54, no. 3 (November 1948): 211-18.

century)² which he called "verstehende soziologie" (usually now called "verstehende sociology"). A fair translation is "a sociology of knowing" or "a sociology of meaning." Weber showed the way to understanding human society through coming to know it as its members do. The ethnographic method of research was well suited to carrying out this approach to studying society because it put the researcher into close and continuing contact with those being studied and thereby enabled him to minimize his natural human tendencies to be blinded by his own life-style (i.e., to be "ethnocentric") when trying to become intimately acquainted with the society and culture (i.e., life-style) of his research subjects. In the language of the social scientist, verstehende sociology is a firm, useful, and desirable foundation for ethnographic fieldwork (i.e., participating intimately, personally, and meaningfully in the lives of research subjects in order to share their meanings and thereby come to know them as they know themselves) because it minimizes tendencies to wear ethnocentric blinders when trying to understand what life is like to those being studied. In plain English, verstehende sociology is admirably suited to helping social researchers to refrain from being subjective when they think they are being objective in their studies of human behavior.

The decision to study southeastern Montana in the verstehende sociological manner was made because this approach fits exactly the primary requirement of social impact research: to investigate what difference the impact makes to and in the lives of people in the study area and, for the

²Many references to these early ethnographic works and to later ones are given on pages 136-40.

purposes of this project, to do so primarily from their points of view. Note what this implies. It implies, for instance, that the researcher must avoid any inclination to get hung up on the usual statistical analyses of human behavior because, among other reasons, the people whose skin he is trying to get into are not at all likely to know their social world in terms of numerical indices or measures. For example, the established residents in Forsyth, Montana tend to avoid most of the local bars now because there has been some violence and other unpleasantness and tenseness in these establishments since certain groups of Colstrip construction workers began frequenting these bars. The locals' definition of the situation is widespread (it includes among its adherents the bars' former rural customers no less than city ones): to use the words of several residents, "It is no longer safe, relaxing, enjoyable, and the like to go to most of Forsyth's bars, especially with your wife or date." It is better to go to the local country club or to Miles City's bars. Little is learned about social impact when it is found that, as a matter of fact, only a small number of construction workers (they are mostly men in one building trade whose members are trying to maintain their national reputation as "good drinkers" and "barroom brawlers") rather than construction workers in general are "really" responsible for the alleged violence and other unpleasantness. Counting such externals as the number of construction workers who fight and cast insults loudly in bars, the frequency with which they so behave, and the like perhaps means something to the researcher who does the counting; and he may report that the great majority of construction workers are really fine fellows and that only a small number are the "real troublemakers." This kind of reporting is what Weber wanted social scientists to play down because it does not address the critical

question of what the situation means to those concerned. It is an actual social fact that the locals define the tavern situation in Forsyth as having been made unwelcome by Colstrip's construction workers; and this reality, not the reality of a counter of externals, is what has to be reported and dealt with when seeking to know this social impact as those being studied perceive it, find meaning in it, remember it, and hence know it.³ In other words, the authors of this report are concerned with understanding the social realities of the study area's research subjects, not with the realities suggested by counting instances of that which is arbitrarily categorized by investigators who eschew ethnography or ethnomethods in general.⁴

Finding and understanding the reality of people who are experiencing social impact is a difficult task which is made still more difficult when, as in the case of southeastern Montana, the social processes at work are complicated and clouded by ever-present uncertainties, ambivalences, rumors, and many similar social ingredients which somehow combine to keep people off balance and wondering if anything in the world is really and truly what it seems to be. As the researcher gradually gains knowledge of the processes at work as informants perceive and define emergent and ongoing situations, and hence construct social realities, he grows increasingly capable of projecting images of the future which people in the study area are creating. They create images of the future through defining coal-related situations

³It should be noted that a small number of construction workers have contributed inordinately to the workers' reputation as "barroom trouble-makers."

⁴Ethnomethods are systematic efforts to account for the behavior of people being studied as they themselves do while they are in process of trying to fit their actions together so as to make (or avoid making) society with each other.

and imagining how these situations will develop and affect them over time, acting so as to protect their interests in light of what they prophesy; they thus tend to create aspects of the future through hedging and other protective actions which become self-fulfilling prophecies.⁵ For example, ranchers who lease surface rights to land developers say they are doing so to protect themselves against an uncertain future course of industrialization. Ironically, even though these ranchers have a strongly anti-development attitude, they are actually tending to make industrialization of coal resources more feasible for land developers and their industrial clients. The irony of all this is not lost upon these ranchers. In interviews they spoke often of how they may well be contributing to the creation of an unwanted future. They find that they are risking entrapment in self-fulfilling prophecies whose outcomes may be much less protective of their interests than they had imagined when they first leased some coal-bearing land. An important point to be made here is that, as noted above, ethnographic data on present social impact can be very useful for predicting the likely social effects of given coal industrial developmental modalities.

Data generated through using ethnomethods, such as ethnography, reveal not only how to make better predictions concerning what the future social impacts will be but also how to assess (including future statistical measurements of) the intensity, degree, or size of present impacts and to predict the kind and amount of future impacts. The secret of this apparently neat

⁵A self-fulfilling prophecy is a prediction which has a way of actually happening because the person making the prediction wittingly and/or unwittingly acts in ways which help to make his prediction (e.g., a definition of a situation) come true.

methodological trick is again to get close enough to the people being studied to know how their self-fulfilling prophecies make definitions of situations seem to come true in both kind and degree. Natural or "folk" measurement is in fact now being done by people in the study area as they form collective definitions of degree of impact of a variety of things, ranging from what will happen to them if land is leased (leading to industrialization and large influxes of people whose very number, rural informants believe, would be incompatible with ranching) to what will happen to ground water if strip mining is done. Some of these things can be influenced by the informants, others not; the former are now being affected by the informants' definitions of situations and attendant self-fulfilling prophecies pertaining to degree as well as to kind of impact.

For the present research, studying social impact using a *verstehende* sociological approach to fieldwork requires that the researcher strive to look at the social world from the point of view of those whose world is being impacted by coal-related developments. He must deliberately suppress most tendencies to speak for himself or in any way to inject his views into informants' accounts. Thus, when he reports what his informants told him about the past, present, and future, he is trying to be faithful to their social world as they experience it, even using their terms and natural language expressions to help describe and document more clearly their understanding of what they do (and do not) take into account and how they do so, how they find meanings in this accounting, and what they define as the individual and collective consequences of all these social practices.

Not all informants are good at the task asked of them; not all are able and/or willing to provide insightful, coherent, and lucid descriptions

of what has been (or will be) happening to them as coal developments get under way in various forms and at given rates. An occasional informant may be (and almost always in fact is) astoundingly articulate, seemingly able and willing to say loudly and clearly what many others like him say less well or not at all. To learn what the less articulate informants "know" about what is happening to and around them the researcher returns to some to try out on them what he thinks he has come to know as a result of interviewing one or more of their especially articulate fellows. The usual response is: "Yeah, that's what I meant but I didn't know how to explain it to you," or, "No, that's not exactly what I meant. What I meant was [and here follows a much clearer account than the informant was able to give when first asked the question(s)]. . ." The researcher then continues checking with informants until he establishes that there is or is not consensus on what is happening in or to whatever he is inquiring about, or that perhaps he misclassified some informants and needs to refine his classification of them or of their attitudes and actions in order to account for seemingly deviant cases, and so on. Also, he continually tries out his attempts on them in order to get them to agree or disagree with his understanding of their accounts and to correct him where they reckon he is mistaken. All the while he is attempting to perceive and understand the changing social world of the informants as they do.

The ethnographer's ongoing assumption is that people in the social scene being studied are the ultimate authorities concerning what is happening there and what it all means to them and others around them. If, for example, the people of a community say that social stratification has been subtle and played down in any overt sense because they value and share a strong

equalitarian commitment, then this is their reality and it must be respected if one is to understand them as they understand themselves. In Thomas's famous words, "If the individual defines the situation as real, it is real in its consequences."⁶ The individual's reality and its consequences for him and his friends and neighbors are accordingly of paramount interest to the researcher. How this reality and its consequences come about, what it means to the individual and his fellows in terms of attitudinal development and behavioral expression, and the like are matters the researcher continually seeks to understand as the actors themselves understand them in their dynamic, changing situation.

A brief word about the relationship between attitudes and actions is in order, mainly because the depictions of informants so far have been much more in terms of their attitudes than their actions; very little has been said to this point about what they have done, are doing, or are likely to do in consequence of having certain attitudes toward coal and power plant development. After literally thousands of studies of people's attitudes toward all manner of things, social scientists have convincingly demonstrated that there is little or no necessary relationship between attitudes and actions.⁷ This means, among other things, that one cannot safely predict how a person with a very strong and persistent attitude toward something is going to act toward it, given the opportunity to do so. In the present research, for example, it was found that some landowners who definitely oppose coal development

⁶William I. Thomas and Florian Znaniecki, The Polish Peasant in Europe and America: Monograph of an Immigrant Group, 5 vols. (Boston: Richard G. Badger, Gorham Press, 1918-1920).

⁷See any sociological or social psychological journal published since 1918.

are leasing or selling coal-bearing land to land developers or directly to energy companies; some such landowners are not at all tempted to sell or lease any of their land but are acting so as to foster some kind of workable accommodation to coal development; and other such landowners are actively fighting off those who seek to develop coal resources anywhere in the vicinity of their farms and ranches. In future reports, the authors will expand discussion of factors which help to account for each of the various courses of action people in the study area take, given that they appear to have very similar attitudes of comparable degree.

Sociological Sampling

It makes an enormous difference whether the purpose of one's sampling design is to permit the researcher to identify and obtain information from individuals with a view to securing data which are likely to be similar to what could be secured if all of the sample's parent population were contacted, or if the purpose of the design is to permit informants to participate in the actual sampling through telling the researcher how to locate and interview persons whose social roles, relationships, situations, desires, needs, and the like are representative of the human behavior that the researcher is interested in investigating. The first kind of sampling is based on the assumption that nothing is known about the population to be studied and that probability sampling must be used to keep the investigation from making too many mistakes in finding and selecting respondents. This is conventional, statistical sampling, the kind ordinarily used in survey research. It has the advantage of providing the researcher with assurance that he can count, compare, examine relationships, and measure research variables with considerable

precision. It is not suited to research which aims to discover how informants classify or label each other, how they find meaning in activities they care about in life, how they engage in processes in which they individually and collectively define the coal development situation and its impact upon their society and themselves, and related matters such as those the present case study is attempting to investigate. Rather, it is most useful only after the researcher has clearly classified and categorized his data and wishes then to find out how many cases he has in each category of behavior, or what the precise distribution of attitudes of a given sort is among the population under study, or the like. To sample a population with the intention of quickly and inexpensively learning, for example, what the several social groupings of the study area's residents are like from the standpoint of each grouping's members and from those of neighbors, friends, relatives, and community officials who know them, and so on, the second kind of sampling must be used. This sampling approach is what the distinguished researchers Glaser and Strauss call "theoretical sampling" because its purpose is to generate new knowledge of theoretical importance, revealing the basic variables at work in the members' daily situations (and hence of importance for succeeding in planning and programming efforts).⁸

Theoretical and sociological sampling are both "verstehende sociological" in principal and general thrust. Both attempt to sample with a view to depicting the social situation being studied as people in the situation

⁸Barney G. Glaser and Anselm L. Strauss, The Discovery of Grounded Theory: Strategies for Qualitative Research (Chicago: Aldine Publishing Co., 1967), pp. 62-65.

view it. The main difference between the two is that the focused objective of theoretical sampling is to generate theory, while that of sociological sampling is to generate empirically sound descriptions of how the research subjects perceive and experience that which is under study (in the present case, social impact of power generating plants).

Glaser and Strauss contrast theoretical sampling with statistical sampling, which is based on probability theory. Their discussion of the difference helps explain the decision to use the kind of sampling chosen for the present project.

It is important to contrast theoretical sampling based on the saturation of categories with statistical (random) sampling. Their differences should be kept clearly in mind for both designing research and judging its credibility. Theoretical sampling is done in order to discover categories and their properties, and to suggest the inter-relationships into a theory. Statistical sampling is done in order to obtain accurate evidence on distribution of people among categories to be used in descriptions or verifications. Thus, in each type of research the "adequate sample" that we should look for (as researchers and readers of research) is very different.

The adequate theoretical sample is judged on the basis of how widely and diversely the analyst chose his groups for saturating categories according to the type of theory he wished to develop. The adequate statistical sample, on the other hand, is judged on the basis of techniques of random and stratified sampling used in relation to the social structure of a group or groups sampled. The inadequate theoretical sample is easily spotted, since the theory associated with it is usually thin and not well integrated, and has too many obvious unexplained exceptions. The inadequate statistical sample is often more difficult to spot; usually it must be pointed out by specialists in methodology, since other researchers tend to accept technical sophistication uncritically.

The researcher who generates theory need not combine random sampling with theoretical sampling when setting forth relationships among categories and properties. These relationships are suggested as hypotheses pertinent to direction of relationships, not tested as descriptions of both direction and magnitude. Conventional theorizing claims generality of scope; that is, one assumes that if the relationship holds for one group under certain conditions, it will probably hold for other groups under the same conditions. . . . This assumption

of persistence is subject only to being disproven--not proven--when other sociologists question its credibility. Only a reversal or disappearance of the relationship will be considered by sociologists as an important discovery, not the rediscovery of the same relationship in another group; since once discovered, the relationship is assumed to persist. Persistence helps to generalize scope but is usually considered uninteresting, since it requires no modification of the theory.

Furthermore, once discovered the relationship is assumed to persist in direction no matter how biased the previous sample of data was, or the next sample is. Only if the hypothesis is disproven do biases in the sample come under question. For generating theory these biases are treated as conditions changing the relationship, which should be woven into the analysis as such. Thus, random sampling is not necessary for theoretical sampling, either to discover the relationship or check out its existence in other groups. . . . However, when the sociologist wishes also to describe the magnitude of relationship within a particular group, random sampling, or a highly systematic observation procedure done over a specified time is necessary. For example, after we discovered the positive relationship between the attention that nurses gave dying patients and the nurses' perceptions of a patient's social loss, we continually found this relationship throughout our research and were quick to note conditions altering its direction. But we could never state the precise magnitude of this relationship on, say, cancer wards, since our sampling was theoretical.

Another important difference between theoretical and statistical sampling is that the sociologist must learn when to stop using the former. Learning this skill takes time, analysis and flexibility, since making the theoretically sensitive judgment about saturation is never precise. The researcher's judgment becomes confidently clear only toward the close of his joint collection and analysis, when considerable saturation of categories in many groups to the limits of his data has occurred, so that his theory is approaching stable integration and dense development of properties.

By contrast, in statistical sampling the sociologist must continue with data collection no matter how much saturation he perceives. In his case, the notion of saturation is irrelevant to the study. Even though he becomes aware of what his findings will be, and knows he is collecting the same thing over and over to the point of boredom, he must continue because the rules of accurate evidence require the fullest coverage to achieve the most accurate count. If the researcher wishes to diverge from his preplanned research design because of conceptual realizations and implicit analyses, he must hold his wish in abeyance or laboriously integrate his new approach into the research design, to allow a new preplanned attack on the total problem. He must not deviate from this new design either; eventually it leads him back into the same "bind."⁹

⁹Ibid.

The reader should now have a working understanding of the roots of the sampling strategy employed in this study. It should properly be called "verstehende sociological sampling" because it is based upon the essential principle of "verstehende sociology," which is to examine and try to understand the world of informants and hence to "know" it as they themselves do. The present research is directed toward obtaining some initial or base-line data on social impact. It is therefore necessarily directed toward learning how residents in the study area are individually and collectively experiencing, defining, finding meaning in, and acting toward industrial interventions and other coal-related changes in their social world. In a word, the researchers are seeking to "know" coal-related social impact as informants themselves are coming to know it. This research method is most suited to enabling the researcher to get close enough to his subjects and their perceptions, thoughts, feelings, and actions in their natural settings to understand their membership and participation in society as they themselves do.

Having chosen their method, the researchers proceeded to sample people in the study area sociologically (explained below). There were some exceptions to be sure. For example, it was necessary to purposely and deliberately seek out certain social categories which had only one or a few representatives in the region (e.g., county public health nurse, land developers, county sheriff, and so on) because of the obvious need to make sure that their observations of coal-related developments were not missed. In general, the fieldwork approach was to use a procedure designed to obtain data which would reveal what informants considered to be a representative view of themselves and each other in their everyday activities and situations.

While following informants' suggestions of persons to contact in order to obtain viewpoints, experiences, and the like which so cover the entire spectrum of such matters that they adequately represent what the researcher is seeking to identify, describe, and analyze, the researcher is obliged to continually search for evidence that the informants' suggestions are based upon misinformation, faulty perceptions, and so on. The idea is to go after negative cases and unexpected results, not to prove the informants wrong but (in this study) to quickly and efficiently get to the limits of their knowledge of the types, life-styles, needs, hopes, fears, commitments, and so forth of people who live in their vicinity or elsewhere in the study area. As soon as the researcher is able to consistently and accurately predict how informants (who were selected with the help of other informants) are going to respond to certain of his basic research questions (on how they define their place in the coal development situation, for example), he moves on to other types of questions and to other types of informants. When the researcher has exhausted his and his informants' abilities to identify other kinds of informants and other sorts of questions of interest to him and therefore of relevance to his research objectives, it is time to terminate this phase of the study and begin putting findings together. Note that in sampling sociologically the researcher does not rely upon his judgment alone, or even principally. Rather, he relies upon the social knowledge of people in the study area to help him to "saturate" the empirical categories pertaining to sampling.¹⁰ In their discussion of "theoretical saturation," Glaser and

¹⁰Ethnographers like to tell a story to contrast probability sampling with what is here called sociological sampling. According to this story, when a sociologist enters a city with a view to studying vice, he does a survey using probability sampling in order to locate houses of prostitution. An anthropologist

Strauss give sound direction for deciding when it is time to stop sampling kinds or categories of behavior.

As we have said, the sociologist trying to discover theory cannot state at the outset of his research how many groups he will sample during the entire study; he can only count up the groups at the end. Since data for various categories are usually collected from a single group--although data from a given group may be collected for only one category--the sociologist usually is engaged in collecting data from older groups, or returning to them, while simultaneously seeking new groups. Thus he continually is dealing with a multiplicity of groups, and a multiplicity of situations within each; while absorbed with generating theory he would find it hard to count all these groups. (This situation contrasts with that of the researcher whose study involves verification or description, in which people are distributed throughout various categories, and he, therefore, must state the number of groups that will be sampled, according to rules of evidence governing the collection of reliable data.)

Even during research focused on theory, however, the sociologist must continually judge how many groups he should sample for each theoretical point. The criterion for judging when to stop sampling the different groups pertinent to a category is the category's theoretical saturation. Saturation means that no additional data are being found whereby the sociologist can develop properties of the category. As he sees similar instances over and over again, the researcher becomes empirically confident that a category is saturated. He goes out of his way to look for groups that stretch diversity of data as far as possible, just to make certain that saturation is based on the widest possible range of data on the category.

One reaches theoretical saturation by joint collection and analysis of data. . . . When one category is saturated, nothing remains but to go on to new groups for data on other categories, and attempt to saturate these new categories also. When saturation occurs, the analyst will usually find that some gap in this theory, especially in his major categories, is almost, if not completely filled. In trying to reach saturation he maximizes differences in his groups in order to maximize the varieties of data bearing on a category, and thereby develops as many diverse properties of the category as possible. The criteria for determining saturation, then, are a combination of the empirical limits of the data, the integration and density of the theory, and the analyst's theoretical sensitivity.¹¹

(i.e., an ethnographer) entering the same city with the same objective goes directly to the first cab driver in sight, asks where the whorehouses are, and at no cost immediately has the information it will take the sociologist many dollars and weeks to obtain.

¹¹Glaser and Strauss, Discovery of Grounded Theory, pp. 61-62.

Ongoing Validation of Data

The researchers continually checked information obtained from given persons with what was learned from other individuals in order to clarify and substantiate the information per se and their understanding of it. They sometimes worked as a team in gathering data and at other times alone but always in such a way that it was necessary for each one to continually check his information and findings with those of others on the staff. Moreover, earlier drafts of this report were reviewed with a cross-section of the study area's residents as part of the checking procedure.

In addition to continually validating data using both informants and each other, the researchers relied on a multiplicity of research techniques to systematically cross-check descriptions and analyses. They utilized open-ended interviews, a wide range of personal observations, small and large group discussions, and analyses of such secondary sources of information as the 1970 population census of Montana. Various categories of informants gave information which was compared and weighed against what was found out from various other categories of informants. So it went. The team strove for assurance and several kinds of reassurance that the data were valid or, in Glaser and Strauss's terms, that "theoretical saturation" had been achieved.¹² In Denzin's term, the method of "triangulation" was used.

Sociology's empirical reality is a reality of competing definitions, attitudes, and personal values. As such, it is a social object in the symbolic environment of the scientist. Any attempt to approximate knowledge of this object must acknowledge this fact. The act of doing research is an act of symbolic interaction. Each sociological method and, in fact, each sociologist generates different lines of action toward this object. Thus, complete agreement between methods and their users can

¹²Ibid.

never be expected. But there are rules of method that govern the sociologist's conduct. His actions--from the use of methods, to the personal values that shape the sociological act--must be made public.

Triangulation, or the use of multiple methods, is a plan of action that will raise sociologists above the personalistic biases that stem from single methodologies. By combining methods and investigators in the same study, observers can partially overcome the deficiencies that flow from one investigator and/or one method. Sociology as a science is based on the observations generated from its theories, but until sociologists treat the act of generating observations as an act of symbolic interaction, the links between observations and theories will remain incomplete. In this respect triangulation of method, investigator, theory, and data remains the soundest strategy of theory construction.¹³

Documentation

Documentation has to do with how the investigator knows something is so and with demonstrating this to the reader's satisfaction. In scholarly and scientific works, each discipline has its conventions for documenting statements in such a way that the reader can check them out to determine their authenticity and credibility or perhaps to obtain more complete information from an original source.

In reports on survey research on human behavior, documentation is built into the tabular presentations of data. Here the investigator shows how many respondents of given categories replied in specified ways to particular questions. It is understood by all concerned that in this kind of research much effort is devoted to prestructuring the information-gathering activity, usually in the form of a questionnaire which is either self-administered or administered by an interviewer. It is further understood that every effort is made to neutralize or at least standardize the influence of the person

¹³Norman K. Denzin, The Research Act: A Theoretical Introduction to Sociological Methods (Chicago: Aldine Publishing Co., 1970), p. 300.

administering the questionnaire upon the respondent, so as to control for "interviewer effect" and consequently to be reasonably certain that the responses will be as much as possible merely a function of the stimuli provided by the written questions. Following the rules for documentation of data generated by statistical sampling, both the investigator and the qualified reader of his report understand that when numbers in the tables are a certain size or larger they indicate, for example, that a significant part of the population which is being reported on definitely said this or did that.

This kind of attention to the number of respondents and to the distribution of their responses is very understandable when examining the documentation in reports on survey or other nomothetic research. However, it has no place in ethnographic research or in any other social research which calls for the investigator to maximize, rather than to minimize, interviewer effect with a view to developing relationships with informants which have the effect of facilitating the generation of desired data.¹⁴ In this kind of research, the process of obtaining data is the key factor in documenting, not the number of interviews conducted or responses obtained. The process involves finding ways of demonstrating to the informant that the interviewer is a qualified, congenial, and trustworthy recipient of information on things in the informant's life about which the respondent cares and takes significantly into account. The fieldworker does more than just question the informant; he sometimes challenges the informant's responses, declares his inability to see how a given reply is

¹⁴Raymond L. Gold, "Toward a Social Interaction Methodology for Sociological Field Observation" (Ph.D. diss., University of Chicago, 1954).

so different from or stereotypical of other individuals in his social category, discusses the informant's situation with him, and in other ways tries to develop a relationship which has the effect of helping the person being interviewed to play his role fully and well. In social psychological terms, the ethnographic fieldworker seeks personally and directly to help the informant to maximize self-expression at minimal self-risk.¹⁵

If the informant happens to be both knowledgeable and articulate, the amount of desired information obtained in a single interview, or perhaps in a series of interviews with that person, can be truly enormous. A few such informants can quickly and expertly reveal to the fieldworker much about the organization and operation of their community, particularly if it is a small one such as those found in the study area.

All this is meant to point out that the ethnographer documents his data not by reporting how many people responded in certain ways to standardized questions asked rather mechanically and unobtrusively but by describing how he developed relationships with informants so as to help them share with him their knowledge of whatever it is he seeks to learn.¹⁶ Accordingly, it is standard practice in the final reports of ethnographic studies to include chapters, sections of chapters, or appendixes which describe in detail how the researcher entered the field, made contact with potential informants, developed (and in some instances failed to develop) relationships with

¹⁵Ibid.

¹⁶Two good examples of such description are: Bronislaw Malinowski, Argonauts of the Western Pacific (New York: E. P. Dutton & Co., 1950); and William Foote Whyte, Street Corner Society, 2nd ed. (Chicago: University of Chicago Press, 1955).

interviewees, used (or at times failed to use) the relationship to generate data, checked the information, and (in studies of literate societies) even got informants to criticize drafts of his reports to help him to represent their social world as they see and experience it.

Observer Bias

As a safeguard against unintentionally biasing the data, ethnographic researchers often arrange to do what they call "reality checking" of their findings in addition to conducting ongoing validation of the data. The latter process involves regularly reviewing with informants the emerging data and the researchers' understanding of what the findings mean to the people being studied. "Reality checking" requires that informants representing the diverse groups and opinions of interest to the research check what the researchers have put together from the data gathered and then affirm that what has been said does in fact accurately represent the situation as they see it. For example, the research team spent an average of two to three hours going over earlier versions of this report with each of a dozen informants, most of whom had already been interviewed and all of whom were regarded as good representatives of the major social groupings and points of view being studied. Not one of these dozen informants found anything about the report more than minimally objectionable, and all their objections and other responses have already been taken into account. None was troubled by the reporting style of speaking for the area's residents, although in the present report a special effort has been made to make it explicit when the views of informants are being presented and when the researchers themselves are commenting about the data.

Ethnographers have an obligation to be accountable first and foremost to the people whose social impacts they are studying; only secondarily are they

accountable to critics, colleagues, or to any other group. In short, reality checking has to be done primarily with the people inside the world being studied, not with those outside the social world which the researchers are trying to faithfully describe. Thus, the present report attempts to paraphrase, summarize, and occasionally quote what informants said about themselves, their fellows, and others who have recently entered their world; the researchers have confined their comments to separate, short discussion sections which are marked as such.¹⁷

Concluding Note on Ethnography

This section is devoted to acquainting the reader with some of the history of ethnography and to reminding him of some of the important scientific contributions which ethnographers have made to anthropology and sociology. Ethnographers are justifiably proud of their ability to report on the human scene in the terms of those whose scene it is. This ability comes largely from rigorously adhering to the strict requirements of ethnomethods, which, as already explained, have the effect of keeping the ethnographer accountable in ordinary human terms to the ordinary human beings whose lives he enters and seeks to know as they do.

The first noteworthy ethnographic reports done in English appeared before the turn of the century. Tylor's and Frazer's works are examples. A monumental ethnographic study by Thomas and Znaniecki, published at the end of

¹⁷Readers unfamiliar with ethnographic reports sometimes wonder if the researchers--wittingly or unwittingly--have put words into informants' mouths or have chosen informants whose views are known to coincide with their own to document their findings. These same readers often unquestioningly accept statistical reports, failing to realize that a judicious selection of questionnaire items or choice of statistics can also very readily present a distorted picture of an actual situation. There are potential strengths and weaknesses in both research methods.

World War I, laid the basis for most scientific social research which has been done since. Its formulation of such concepts as "definition of the situation" has made a lasting contribution to theory of human behavior, and its methodological notes are still being read by active researchers. The Lynds' study of "Middletown" in the 1920s was a pioneer ethnography of an American community. The ethnographic studies in a large city done by Chicago sociologists like Thrasher followed and paved the way for more recent ones like Whyte's (during World War II) and Liebow's (1960s) studies of big-city corner gangs. Throughout this century, many anthropologists have studied preliterate societies ethnographically. The following list is a bibliographic sampling of works of the sort just noted.

- 1871. Tylor, Edward B. Primitive Culture. 2 vols. London: J. Murray.
- 1890-1920. Frazer, J. G. The Golden Bough. 12 vols. London: Macmillan & Co.
- 1902-1904. Booth, Charles. Life and Labor of the People of London. 16 vols. London: Macmillan & Co.
- 1918-1920. Thomas, William I., and Znaniecki, Florian. The Polish Peasant in Europe and America: Monograph of an Immigrant Group. 5 vols. Boston: Richard G. Badger, Gorham Press.
- 1923. Anderson, Nels. The Hobo: The Sociology of the Homeless Man. Chicago: University of Chicago Press.
- 1928. Wirth, L. The Ghetto. Chicago: University of Chicago Press.
- 1929. Lynd, Robert S., and Lynd, H. M. Middletown. New York: Harcourt, Brace & World.
- 1932. Fortune, R. G. Sorcerers of Dobu: The Social Anthropology of the Dobu Islanders of the Western Pacific. London: George Routledge & Sons.
- 1932. Mead, Margaret. The Changing Culture of an Indian Tribe. New York: Columbia University Press.
- 1932. Richards, Audrey I. Hunger and Work in a Savage Tribe: A Functional Study of Nutrition Among the Southern Bantu. London: George Routledge & Sons.

1933. Bakke, E. Wight. The Unemployed Man: A Social Study. London: Misbet.
1933. Sherman, Mandel, and Henry, T. R. Hollow Folk. New York: Thomas Y. Crowell Co.
1934. Hogbin, H. Ian. Law and Order in Polynesia: A Study of Primitive Legal Institutions. New York: Harcourt, Brace & World.
1934. Redfield, Robert, and Villa, R. A. Chan Kom: A Maya Village. Washington, D.C.: Carnegie Institution of Washington.
1935. Salter, J. T. Boss Rule: Portraits in City Politics. New York: McGraw-Hill Book Co.
1935. Ware, Caroline F. Greenwich Village, 1920-1930: A Comment on American Civilization in the Post-War Years. Boston: Houghton Mifflin Co.
1936. Thrasher, Frederic M. The Gang: A Study of 1,313 Gangs in Chicago. 2nd rev. ed. Chicago: University of Chicago Press.
1937. Lynd, Robert S., and Lynd, H. M. Middletown in Transition. New York: Harcourt, Brace & World.
1937. Anderson, Elin L. We Americans: A Study of Cleavage in an American City. Cambridge: Harvard University Press.
1937. Dollard, John. Caste and Class in a Southern Town. New Haven: Yale University Press.
1939. Ekvall, Robert B. Cultural Relations on the Kansu-Tibetan Border. Chicago: University of Chicago Press.
1939. Embree, John F. Suye Mura: A Japanese Village. Chicago: University of Chicago Press.
1939. Hall, S. Warren. Tangier Island: A Study of an Isolated Group. Philadelphia: University of Pennsylvania Press.
1939. Miner, Horace. Saint Denis: A French Canadian Parish. Chicago: University of Chicago Press.
1939. Powdermaker, Hortense. After Freedom: A Cultural Study of the Deep South. New York: The Viking Press.
1940. Bakke, E. Wight. Citizens Without Work: A Study of the Effects of Unemployment upon the Worker's Social Relations and Practices. New Haven: Yale University Press for the Institute of Human Relations.
1940. Cottrell, Fred. The Railroader. Stanford, Calif.: Stanford University Press.

1940. Davis, Allison, and Dollard, John. Children of Bondage: The Personality Development of Negro Youth in the Urban South. Washington, D.C.: American Council on Education.
1940. Rogler, Charles C. Comerio: A Study of a Puerto Rican Town. Lawrence, Kan.: University of Kansas Press.
1941. Redfield, Robert. Folk Culture of Yucatan. Chicago: University of Chicago Press.
1941. Rosten, Leo C. Hollywood: The Movie Colony, the Movie Makers. New York: Harcourt, Brace & World.
- 1941-1959. Warner, William Lloyd, et al. Yankee City Series. 5 vols. New Haven: Yale University Press.
1943. Hughes, Everett C. French Canada in Transition. Chicago: University of Chicago Press.
1944. Du Bois, Cora, The People of Alor: A Social Psychological Study of an East Indian Culture. Minneapolis: University of Minnesota Press.
1945. Leighton, Alexander H. The Governing of Men: General Principles and Recommendations on Experience at a Japanese Relocation Camp. Princeton, N. J.: Princeton University Press.
1945. West, James. Plainville, U.S.A. New York: Columbia University Press.
1946. Benney, Mark. Charity Main. London: Allen & Unwin.
1946. Gillin, John. Moche, A Peruvian Coastal Community. Washington, D.C.: Smithsonian Institution, Institute of Social Anthropology, No. 3.
1946. Hicks, Granville. Small Town. New York: The Macmillan Co.
1946. Thomas, Dorothy S., and Nishimoto, R. S. The Spoilage. Berkeley and Los Angeles: University of California Press.
1948. Radcliffe-Brown, A. R. The Andaman Islanders: A Study in Social Anthropology. Glencoe: Free Press.
1949. Boder, David. I Did Not Interview the Dead. Urbana, Ill.: University of Illinois Press.
1949. Hollingshead, August B. Elmtown's Youth. New York: John Wiley & Sons.
1949. Mead, Margaret. Male and Female. New York: William Morrow & Co.
1949. Sanders, Irwin T. Balkan Village. Lexington, Ky.: University of Kentucky Press.

1949. Wagley, Charles and Galvai, Eduardo. The Tenetehara Indians of Brazil: A Culture in Transition. New York: Columbia University Press.
1949. Warner, W. Lloyd. Democracy in Jonesville: A Study in Quality and Inequality. New York: Harper & Row Publishers.
1950. Bain, Robert K. "The Researcher's Role: A Case Study." Human Organization 9, no. 1 (Spring): 23-28.
1950. Bossard, James H. S., and Boll, E. S. Ritual in Family Living: A Contemporary Study. Philadelphia: University of Pennsylvania Press.
1950. Gordon, Thomas. "Research as an Experience in Human Relations." Human Development Bulletin (January): 6-10.
1950. Malinowski, Bronislaw. Argonauts of the Western Pacific. New York: E. P. Dutton & Co.
1951. Banfield, Edward C. Government Project. Glencoe: Free Press.
1951. Fichter, Joseph H. Southern Parish: Dynamics of a City Church. Vol. I. Chicago: University of Chicago Press.
1951. Osgood, Cornelius. The Koreans and Their Culture. New York: The Ronald Press Co.
1952. Ashton, Hugh. The Basuto. London: Oxford University Press for International African Institute.
1952. Walker, Charles R., and Guest, Robert H. The Man on the Assembly Line. Cambridge: Harvard University Press.
1955. Redfield, R. The Little Community: Viewpoints for the Study of a Human Whole. Chicago: University of Chicago Press.
1958. Dobriner, W. M. The Suburban Community. New York: G. P. Putnam's Sons.
1959. Mills, C. W. The Sociological Imagination. New York: Oxford University Press.
1960. Slotkin, J. S. From Field to Factory: New Industrial Employees. Glencoe: Free Press.
1960. Stein, M. The Eclipse of Community. Princeton, N. J.: Princeton University Press.
1962. Caudill, Harry M. Night Comes to the Cumberlands: A Biography of a Depressed Area. Boston: Little, Brown & Co.

1962. Frake, C. O. "The Ethnographic Study of Cognitive Systems." In Anthropology and Human Behavior, edited by T. Gladwin and W. C. Sturtevant. Washington, D.C.: Anthropological Society of Washington.
1962. Gans, H. J. The Urban Villagers. New York: Free Press.
1962. Salisbury, R. F. From Stone to Steel; Economic Consequences of a Technological Change in New Guinea and Vunamami: Economic Transformation in a Traditional Society. Melbourne and Cambridge: The University Presses.
1963. Metzger, D., and Williams, G. E. "A Formal Ethnographic Analysis of Tenejapa Ladino Weddings." American Anthropologist 65, no. 5 (October): 1076-1101.
1965. Wallace, S. E. Skid Row as a Way of Life. Totowa, N. J.: The Bedminster Press.
1966. Breese, G. Urbanization in Newly Developing Countries. Englewood Cliffs, N. J.: Prentice-Hall.
1967. Gans, H. J. The Levittowners; Way of Life and Politics in a New Suburban Community. New York: Pantheon Books.
1967. Liebow, Elliot. Tally's Corner. Boston: Little, Brown & Co.
1970. Firth, R. Families and Their Relatives, Kinship in a Middle Class Sector of London: An Anthropological Study. New York: Humanities Press.
1973. Geertz, Clifford. The Interpretation of Cultures. New York: Basic Books
1973. Young, Louise B. Power Over People. New York: Oxford University Press.

The Case Study's Research Team

Two persons, Alice Sterling and Raymond Gold, did the fieldwork for the present social impact study. They worked out of a field station set up at Colstrip. Trained in mathematics and education as well as sociology, Sterling has been doing fieldwork nearly full time for the past several years. Born in Montana, she is middle aged and a regular staff member of the Community Service Program at the University of Montana. A. Ph.D. sociologist and middle aged, Gold has taught and done research at the University of Montana since 1957.

Born in Chicago, he has lived and done social research in various parts of the nation and abroad. Also on the team were Kathy McGlynn, who was responsible for turning the fieldworkers' notes into essays; Ed Dobb, who did the final map drawings and dug out the numerical data; and Julie McVay, who typed this report.

In general, the fieldworkers entered a community unobtrusively, observed (through walking around town and looking and listening) for a few days, and then began introducing themselves to community officials, the newspaper editor, and others who were likely to know the town and be able to suggest how to get acquainted with it. In the course of making these introductions, the fieldworkers explained what they were doing and why. They received much assistance that was very helpful. For example, the initially contacted interviewees suggested who might turn out to be key informants in town and in the surrounding rural areas. They showed that they were very familiar with the rural people, many of whom were friends and relatives. Very soon the fieldworkers were in contact with other government officials, merchants, store employees, land brokers, financiers, health professionals, welfare workers, students, educators, laborers, engineers, housewives, clergymen, tribal representatives, law enforcement personnel, senior citizens, newsmen, lawyers, railroad employees, miners, ranchers, farmers, hired hands, and various categories of construction workers. Each person contacted was asked to identify people in the area who were locally thought to be able to speak knowledgeably about the area, a social group, a point of view, an occupation, or other pertinent topic desired for research purposes. The fieldworkers' lists of locally recommended potential informants grew to hundreds in an amazingly short time.

As people were interviewed, they were asked to indicate the persons in the area they knew, associated with, considered their friends, and the like. After contacting some of these named people it was not very difficult to begin identifying natural communities of friends, acquaintances, and relatives. Asking people such questions as whom they would invite to a wedding helped in this identification. Knowing the limits of natural communities helped the fieldworkers to decide what questions to ask, how to ask them, and when it was no longer necessary to inquire about certain topics because others in the natural community had already covered them sufficiently.

The interviewers used lists of topics pertaining to the project's research objectives as a basis for wording questions in each interview. Related questions always naturally arose, just as did responses which served to introduce matters which the researchers recognized they ought to be inquiring about more systematically.

The following are personal accounts of field observations prepared by the two fieldworkers. It is hoped that these accounts will help the interested reader to comprehend how the team generated the data on which the present report is based.

The following narrative is intended to help the reader understand the special setting in which I collected data for this study. An ethnographic report from a young anthropologist writing about his first visit to a remote research site might begin, "Imagine yourself set down on the shore at the edge of the jungle watching the canoe that brought you disappear from sight." Comparing such an exotic experience to finding oneself alone in the silence of an unfurnished field station in a company town 450 miles from one's nearest acquaintance, without newspaper, telephone, or TV, and being charged with finding and reporting what this strange land was like from the viewpoint of those who called it home may be overdramatic. But the radio reception was poor enough to compare with what it must be like to seek contact with the outside world from a more distant wilderness, and the young and confident anthropologist was probably more realistic in his preparation for and expectations of his adventure than I was for moving into rural Rosebud County.

Although I was born in eastern Montana, I have not lived there since infancy but have heard tales of its rattlesnakes and terrible winters. For the past eighteen years I have been living in western Montana, where there is sometimes no more understanding about the plains area of Montana than is found in states far away. So, although I approached my assignment with interest and curiosity, my preconceptions were of barren wasteland, taciturn country folk ala Gary Cooper, and provincialism. I could not imagine that within a few short weeks I would be sitting and visiting with my new friends, humbly respectful of their wisdom and dignity. I soon experienced the humiliation of discovering one's ignorance and misconceptions about a land and its people.

Authorization for the study had been almost assured in late summer of 1973, but it was not until March, 1974 that a formal agreement was reached that made it possible to begin the project. (Fortunately, we were able to start research around Colstrip early in autumn, 1973 using other funding sources.) Because the study area was so far from the research team's home base and because the area to be studied was so large, the first task was to find a suitable place in which to live and work on site; we needed a field station that would give the fieldworker minimum travel and housekeeping problems. Initially a trailer in Forsyth seemed the best idea; but concerns about weather, costs, heating oil shortages, and leaving it unattended for periods of time led to an effort to find another answer. Western Energy officials in Butte had been contacted previously about including the company's town of Colstrip in the study, and they had advised us to see Nolan Fandrich, the town manager. On the first visit to Colstrip, Mr. Fandrich agreed to rent a unit of a fourplex that was under construction to the research project, and furniture rental was arranged with a Billings secondhand store. Meanwhile a Forsyth motel unit served as a temporary field station, and the first data on social impact came from the motel operator whose anxieties and ambivalences about the effects of coal development on her life and business and town were apparent in our first mundane exchange as I registered. This was early in November when I began to talk to merchants and others in Forsyth who were accessible because they worked in public places. At first I simply walked in, introduced myself, and asked for a little time or for an appointment to tell them about what I was doing. In every case they graciously gave the time at once and usually began to respond to my brief description of the study with their views of what it was like to live and work in Forsyth and what they expected it would be like. Their help in identifying who they thought would be good informants came easily and quickly; the same leaders of various aspects of community activity were named by many of the first informants, partly because the town is so small and most had lived there for so long. Before very many days of formal interviewing were finished, the station at Colstrip was available. For the next six months fieldwork alternated between Forsyth, Colstrip and other parts of Rosebud County, and the home base at the University of Montana, according to the schedules of informants, of their organizations, of the research team, and of various agencies and others involved in activities related to coal development.

I spent two or three weeks each month in the field interviewing informants, both formally and informally; writing up data; and re-interviewing and otherwise trying to validate emerging themes. I also spent one or two weeks each month at UM discussing procedures and findings with the research team and other colleagues, writing reports, and trying to keep up with a volume of printed information that was coming out about coal and related developments in the study area. The trip from Rosebud County to Missoula County was made by air, railway, car, and combinations of each so often that going from Missoula to Billings to Colstrip became as much like "going home" as did the return trip.

The first contacts with informants in and around Colstrip were not as easily managed as in Forsyth because there were no merchants to accost and few public places to enter. The first formal interview was arranged by calling the Bechtel plant (prime contractors for the power plant construction) for information about their role in the community. The call was referred to a Montana Power Company spokesman; and this knowledgeable informant took me on a tour of the mine, the construction site, and the town. All the while he narrated volumes of information about employment figures and policies, expansion plans, characteristics of the town and its people, and some history of the coal development activities. A few days later, I went on a formally scheduled bus tour of the Billings generating plant, Colstrip, Peabody mine, and Westmoreland operation in Sarpy Creek. As the places and people I had read about became real, what I had read began to have some impact. On the tour I met two ranchers who a few days later became the first sources of many names of those who became our key informants. The following week two community affairs took place that helped me get acquainted with the study area.

The annual bull sale at a ranch just a few miles away from Colstrip is a festive event for which children stay home from school, relatives fly in from across the state, and a country fair atmosphere prevails. It was a beautiful November day. I invited two newcomers who lived in other units of the fourplex to ride along, and at the sale I began to learn a little about the special kind of western hospitality that ranchers in this area extend. Because we were obviously strangers, local ranchers' wives would come up to us and introduce themselves; and we responded with who we were and why we were in Colstrip. One of these gracious ladies was the owner of the ranch and the bulls and talked about this being the last sale on the ranch because it had been sold to a power company. Indeed, just beyond the corrals you could see the first stages of construction of a giant strip-mining shovel.

The second event was the annual community church bazaar held in the high school gym. Signs at the post office solicited contributions of various kinds; so I packed up some candied nuts, met others who were contributing, and at the bazaar bought jelly from a young mother who had lived in Colstrip all her life. She had always been active in school, church, and community activities and was the source of a long and most

productive list of prospective informants ranging from retired school teachers to families of the new construction workers. Interviewed that evening, she and her husband provided some of the first data on life-styles in Colstrip that were most useful in making early assumptions to test on other informants. Thus, after only a few weeks in the field I had acquired the names of more than one hundred people who were identified by friends, acquaintances, and each other as being representative of or knowledgeable about a great number of identified viewpoints and social groupings in the study area.

Collecting the Data

From the middle of November until the middle of May I spent much of my time contacting informants, setting up appointments, and developing relationships that permitted us to interact in ways that helped us to understand each other. Some were interviewed only once; most often this was because there was just not time enough to go back. Some in each social grouping were interviewed more than once and were asked to review drafts of reports to validate that we were correctly reflecting the viewpoints of those like themselves. We had to learn to understand and sometimes speak each other's language.* I learned that "manual" and "non-manual" replaced the old "blue collar" and "white collar" job descriptions, that "miner" sometimes meant anyone who wasn't ranching, and that "rancher" usually meant anyone who wasn't a miner. They learned that "social" impact meant more than impact on their evening and weekend activities.

It was also necessary to learn local rules of etiquette. From Old Western novels I knew that you did not ask how much land a rancher owned, or leased, any more than you would ask a neighbor how much money he had in the bank. Here, I learned that you also did not ask how many cattle he had and most certainly not the price that he got for his calves.

Most interviews began easily. It was helpful, I am sure, that I could identify myself as working for the University of Montana and could make believable assurances of confidentiality and purpose. In only one interview did I feel that I had to keep asking direct questions in order to complete the interview; usually it was only necessary to suggest a few points to talk about in order for the informant to come up with many others of interest to the study. Most informants were eager to talk with someone who was interested in their concerns or joys; and some seemed not only to want to get their views into the study but also to take the opportunity to discuss the reasons for their views, to process information they had read or heard with someone else, and to talk about concerns in ways that brought up other concerns or that generated new ways of thinking about

*Later, at hearings on the Bureau of Land Management's Decker-Birney impact study, the importance of sharing a common language became more obvious as those reading the study found that it sometimes used words in ways peculiar to government agencies or at least to the BLM.

the discussed topics. Generally, I would return to the field station pleased and even elated with the day's work, ready to listen to the tape if the interview was recorded or to write up the notes if it was not.* But, of course, there were some failures and frustrations.

When you are working alone, a poorly done interview or being deprived of the daily newspaper can bring on some despair. Also, twice during the study period I was told that someone I had spoken with had complained about being approached or about the interview. The first instance was reported to concern the wife of a Bechtel engineer, but the person who relayed the complaint to me could not remember her name--only where she lived. Since I had not yet interviewed anyone in that part of town, I was unable to verify the problem or try to make amends. The second incident was reported about a rancher who said I had asked leading questions, apparently wanting only certain desired answers. Again I was unable to find out who he was. It was thus impossible to check out either report and to clear up the concerns that were present. Other problems were logistical and more manageable.

In rural areas I learned to travel with a thermos of tea and survival rations, to ask to use the informant's bathroom before leaving, and to not expect signposts at intersections. I did not learn how to tell when I was imposing upon ranchers and when I was not because of their commitment to a special brand of Western hospitality. The offers of their time and help and the invitations to share their homes and friends always seemed spontaneously warm but must sometimes have been made in spite of real inconvenience.

It was easy to identify with ranchers, not because I was so much like them but because they often seemed to be examples of the confident, courteous, strong American prototype with high ideals of responsibility and initiative. But it was even easier to identify with the study area's newcomers because I was a newcomer, too. I, too, waited in the cold to use a pay phone that often didn't work and spent the quiet evenings eating too much. I, like some of them, chose to come to this "mining camp" that freed me from family ties and social and civic responsibilities. Like them, I found that going for the mail at noon and getting the newspaper at night were important events of the day. I asked a workman who came one wintery night to do some carpentry on the building why he did that job at night. He said, "There's nothing else to do; the nights get pretty long." Of course, that is why I spent all evening listening to taped interviews or planning the next day's schedule, and that's why Saturdays and Sundays were the same kinds of days as the other five.

*There were no criteria to determine when or when not to use a tape recorder. I preferred to tape all interviews but did not, knowing there would not be time to listen to, much less transcribe, all of them.

Processing and Validating the Data

How the lone ethnographer in a primitive village manages his data without the help of a knowledgeable team, I do not know; nor do I know how he is able to keep from "going native," i.e., becoming exclusively a participant in the scene rather than also an observer and reporter.* In this study there were frequent meetings of the fieldwork team not only with each other but also with colleagues at UM in order to continually compare experiences, question procedures and findings, share successes and failures, and process the data into a written form that could be shared with others and also provide the team with ideas for further fieldwork. Often we would sit around a tape recorder for an hour or two, not just to share information but to record our reactions to each other's experiences--which sometimes generated fresh insights.

The data were also processed with key informants in the study area and with others involved in coal-related activities but who did not live there. Always careful to protect informants' identities, we were nonetheless able to talk from notes and reports with visitors who came to the field station from state and federal organizations and who had some knowledge of the area and coal activities. After reports were drafted, the fieldworkers returned to as many informants known to represent different viewpoints as there was time to reach and asked them to read and criticize, correct, or add to the written material.

Another way of validating the data was by attending many of the public hearings on coal development held in and near the study area by the BLM, Montana Department of Natural Resources, and Senator Metcalf. Some new data were collected at these hearings, but mainly they were used to check our findings and to be sure that we had not missed some significant group of informants. Finally, a draft of the report was ready for distribution to those who had requested that the study be done, and their criticisms were received and agonized over. Data were then rechecked with informants, and pages were rewritten.

Our grant charged us to produce a report that would tell what the social impact of Colstrip generating plants #3 and #4 would be on the lives of the people in the study area from their points of view. Of this kind of research, Malinowski says, "time [is] given to us for a moment to look at the world through another's eyes and feel ourselves what it must feel to him to be himself."** It is unlikely that this can be done without changing the points of view of the fieldworker; and certainly the experience

*The editor-reporter of a small town newspaper is like an ethnographer. He is continually being a participant observer in his community and must always be at least on the verge of "going native."

**Malinowski, Argonauts of the Western Pacific, p. 29.

has changed my feelings toward eastern Montana, toward ranchers and miners, and toward power and coal companies. The informants, too, were changing their points of view during the research period. How much change was due to the process of being encouraged by the fieldworkers to talk about and therefore more closely examine their world and how much was due to all of the other events and people that continue to intervene in their lives cannot be known. It is certain that these changes will continue, and our report tells only what was happening when the fieldwork ended. The overall impact of coal development on the lives of the people in the study area is just beginning.

-- A. S.

In Spring 1973, the likelihood of large-scale coal development in Montana began to look so great that I decided to take a firsthand look at eastern Montana to see for myself what was going on and to explore the need for social research services such as those which our department can offer. During the next few months, I spoke with a variety of people in southeastern Montana, spending most of my time there with a number of officials of the Cheyenne and Crow tribes. My original inclination was to try to develop a research project with the Indians, sensing that they had at least as much at stake in coal-related development as any group in that part of the state. I actually received permission from the Cheyenne Tribal Council to do research on their reservation; the Crows were less willing to allow an outsider to come in and do social research on so hot an issue. It turned out that there were strong, mixed feelings on both reservations concerning the coal issue--and many suspicions toward non-Indians, perhaps especially toward those who did not have an apparent axe to grind when offering to assist Indians in dealing with the fantastic ramifications of coal development. Around the middle of the summer, 1973, the two reservations received an OEO grant to study likely impacts of coal development. Given the uncertainties of my relationship with the Indians, particularly the Crows, who seemed to have decided that I was an environmentalist in sociological dark glasses, I decided to try to begin doing research elsewhere in that part of the state and, meanwhile, to occasionally remind the Indians that I wished to continue exchanging information with them and to cooperate in other respects should it be mutually helpful to do so. (Here, over a year later, I have just resumed some significant face-to-face contact with Cheyenne officials and am about to work with them on some state-supported research on and around their reservation. I am still communicating with the Crows, but they are not yet ready to risk the possibly heavy intervention of the process of doing social impact research.)

Having been convinced of the great need for social impact research in southeastern Montana, I started preparing project proposals and seeking funds. The grant to do the present research was received in March, 1974.

The process of choosing personnel for the project began several weeks before it was funded. Regular staff of the Institute for Social Science Research (retitled Community Service Program as of July 1, 1974) filled all project positions but one. It was fortunate that, in addition to the project director, the one ISSR fieldworker who was available was middle aged (and therefore had no small children to curb her mobility) and capable of coping with the extraordinary demands of doing fieldwork in south-eastern Montana. Reconnaissance trips to that part of the state had shown me that tensions were already high and scapegoating already evident; so it appeared likely that we who would do fieldwork there would have to use all the experience and finesse we could muster to adequately play our roles in such a scene in the short period of time available to us. After a few short weeks of preparation we were ready to set up field stations at Gillette and Colstrip. Rounding out the team were three persons who remained behind at the Missoula office to compile social indicator data, perform various secretarial duties, and do the lion's share of the organizing and composing required to turn field notes into project reports.

I decided to start the Montana fieldwork at Forsyth, which seemed to be a much busier place than it had been when I last did fieldwork there (about five years ago). I was curious to get local accounts of the evident change in the number and appearance of customers in the community's downtown area and to get some local advice concerning how to identify those who were locally thought to be good observers of the town and its environs. Previous research in small towns in Montana had taught me that clergymen are almost always among the better informed observers of the local scene, and so I proceeded to set up interviews with two Forsyth clergymen with whom I had had previous research relationships. As expected, these two informants were most helpful in bringing me up to date on changes in and around Forsyth (many parishioners were from the surrounding rural area) and in providing me with names of people they considered to be good sources of information of the sort I indicated an interest in securing. I repeated this procedure in contacts with the newspaper editor (his paper, a weekly, serves the whole county and is highly regarded and widely read), the banker, a county commissioner, the sheriff, and the county superintendent of schools, some randomly selected businessmen, and a few others. After only a week, I had what I thought was a good introduction to what was going on in and around Forsyth; and I had a list of over one hundred names (not counting duplications of certain names which seemed to be on the tips of most of my initial informants' tongues; these oft-mentioned people were contacted as soon as I could) of people my informants thought were good representatives of various points of view concerning coal development or were good spokesmen for certain segments of the community or of social categories they thought I should take into account when trying to understand the area and how it was being affected by coal-related industrialization. I also learned in that first week in Forsyth that the general perception was that the town was experiencing a very noticeable and welcome upturn in business, without feeling that its way of life was particularly affected. Social impact, I was informed, was much heavier out in the rural areas, where landowners were reportedly very concerned about how their ranching operations and life-styles would

be changed by industrial activity and the accompanying influx of a variety of workers and their families. Since what I was being told checked out exactly with what my fieldwork colleague was also being told in Forsyth, we decided to spend the majority of our time during the next several weeks interviewing landowners. After really getting acquainted with landowners, we were more convinced than ever that they were the most significantly impacted category of informants in our portion of the study area. We therefore spent a sizeable portion of the remainder of our study period interviewing ranchers. We also reinterviewed some townspeople in Colstrip and Forsyth and arranged to get acquainted with others with whom we had not yet had much contact, such as construction workers, miners, and their wives.

This seems to be a good place to describe how I introduced myself to people, explained what I wished to talk with them about and why, scheduled and conducted interviews with them, and in other respects systematically generated data. My usual procedure for introducing myself to prospective informants was to phone and identify myself as a sociologist from the University of Montana at Missoula who was doing a study of the social impact of coal-related development in this part of the state. I would mention that the study was sponsored by federal and state agencies and that the findings would be made available to all interested persons and organizations in summer 1974. If helpful, I would give an idea of the sorts of questions I was interested in asking and why I wished to ask them. Ordinarily, this introduction took only a few minutes. Because coal development is of such interest to virtually everyone in the study area, it did not require any selling or convincing of any sort to induce the people I phoned to become informants. In fact, nobody I phoned for an interview turned me down. (Not even one? No, not even one!) To me, this merely demonstrated that when a legitimate-sounding person tries to set up interviews with people in order to talk with them about a subject that concerns them greatly, it is no problem at all to arrange an appointment. Sometimes my colleague set up interviews for me, using the same approach and obtaining the same results.

When entering the informant's house (or office), I would reintroduce myself and offer a more complete explanation of what we were trying to do and why, and I would then deal with the inevitable question, Why did you ask me of all people to be your informant? I would always tell the informant the exact truth, which in the ordinary case was that his/her name was mentioned by a number of people who thought him/her to be a good person to talk with about how people in the community or the area or the occupation or the particular social category of interest felt about what was happening to them in consequence of coal-related development. I would never say who the recommenders were, even if asked. After explaining that such recommendations of people to contact for interviews are always considered confidential, the subject was always dropped without any problem. After assuring the person that the findings would be aggregated so that no informant's identity would be revealed without his specific consent, the interview began.

I always make a practice of trying out what I think I have learned from previous informants on succeeding ones until I am reasonably certain that I am able to sort out idiosyncratic material from that which really represents one or more categories of informants. Doing this usually entails discussing more than questioning and often gets us so involved in the interview that we both tend to forget other appointments. Even scheduling interviews a few hours apart in town or several hours apart in rural areas, where long drives may be required, does not always keep me from having to phone the next person on my schedule to apologize for being late. Another reason for continually trying out findings on informants is to try to be as certain as I can that my understanding of what they tell me is as close to theirs as I can get. I also want to obtain all pertinent versions or interpretations of given matters concerning which there are apparently various points of view, and trying findings out on people is an effective way of getting them to say they agree or disagree and why.

Some informants turned out to be so knowledgeable and articulate that I returned in person and/or by phone again and again to reality check data and my understanding of the general or particular meaning of what I had gathered and learned. When we began producing written reports, these and other locally identified, competent, and representative informants were asked to read and criticize them. Again, these persons never refused even though they were probably very busy doing their jobs, and the review process alone would consume much more of their valuable time than I had taken in previous talks with them. I checked and re-checked my findings and their meaning to those concerned and did so incessantly because I wanted to do all I could to adequately represent all experiences and points of view of people whose lives were in many cases obviously being significantly affected by the industrialization of coal resources. With feelings and stakes running very high, I felt morally obligated to process data until what I had was as accurate and complete as time and energy would allow it to be. I also anticipated criticism from outside reviewers who were unfamiliar with or who in any sense felt threatened by qualitative data and wanted the data to be able to stand up against any manner of attack.

I should mention that I sometimes tape-recorded interviews but usually relied on notes I took during interviews because, while there is no good substitute for a complete, verbatim account of an interview, we simply did not have the time to listen to a great many tape recordings nor the money to have many tapes transcribed. Neither tape recording nor taking notes presented any problems. If the interviewer feels comfortable with these procedures, the informant is put at his ease readily enough no matter how sensitive or delicate the area of discussion may be.

My fieldwork colleague and I are now trying out this report on informants as part of getting it into final form. As colleagues, we have participated together in many interviews, tried out findings on each other, argued about the meaning of data, checked meanings out with the ultimate authorities (our informants), and finally are now doing the very last bit of reality checking. Simple social facts (i.e., what people

generally agree is so) are sometimes extremely difficult to come by and even more difficult to depict on paper. I, and we, hope we have done what our informants consider to be an adequate job of reporting on how the social facts of their lives are being influenced by efforts to develop coal resources in general and power plants in particular in southeastern Montana.

R. L. G.

APPENDIX B: NUMERICAL DATA CONCERNING THE SOCIAL IMPACT OF COAL DEVELOPMENT IN SOUTHEASTERN MONTANA

Introduction

The data presented in this part of the report are statistical and represent a selective description of pertinent social variables of concern in the study area. References to these data and how they support interview findings have already been made throughout this report. Numerical information has been grouped here for the convenience of readers interested in this type of presentation and has been taken from an aggregate number of sources.

Although interviewing was almost exclusively confined to Rosebud, Big Horn, and Powder River counties, the statistical data gathered pertain not only to these counties, where the bulk of current industrial activity and immediate social concerns lies, but also to those counties which are nearby and thus may anticipate some impact. For comparative purposes, the data presented in the following pages have for the most part been compiled for three basic areas: the principal county of interest (Rosebud) the counties surrounding it (termed "study region" when grouped), and the state. Discussion of the data is included with each table rather than at the end.

Composition of Study Region

The study area of concern to this project is composed of the following sparsely populated counties: Big Horn, Custer, Garfield, Musselshell, Petroleum, Powder River, Prairie, Rosebud,

and Treasure. Because Yellowstone County is characterized by some dense population and urbanization and because the number of intervening variables here is quite large, information concerning it has been excluded from this section.

Vital Statistics

Intrastate comparisons. The data available regarding the number of births, deaths, and divorces from 1967 through 1972 are fairly comprehensive. The number of births is broken down by county and race for the years 1967 through 1971, by county and sex for 1972, and by county and month for 1973 (through October). The number of deaths is broken down by county, race, and selected cause for the years 1967 through 1972, and by county and month for 1973 (through October). Both the number of births and the number of deaths are further broken down by place of residence and by place of occurrence for the years 1967 through 1972, and by place of occurrence only for 1973 (through October). The number of marriage dissolutions is broken down by county for the years 1967 through 1973.

The major shortcoming in this category is the lack of current data. Because the reporting system relies on an exchange of records between counties, i.e., upon the transfer of records from place of occurrence to place of residence, there is a time lag of at least six months in the collection of data and a time lag of at least a year in the publication of that data by the State Department of Health and Environmental Sciences. Another gap in

the data is the absence of a breakdown of accidental deaths by motor vehicle accidents for counties, prior to 1972.

Summary. The data in table 1 show that the number of births by place of residence in Rosebud County increased by 77 percent from 1967 to 1971 (101 births in 1967 to 179 births in 1971) and decreased in 1972 to 142. The place of occurrence figure for 1973 indicates that the number of births may be beginning to rise again in Rosebud County; while there were only 10 births by place of occurrence in 1972, there were 12 births by place of occurrence by October in 1973 (data not shown). Figures for the study region show that from 1967 through 1970 the number of births by place of residence followed the same pattern as in Rosebud County, increasing steadily from 688 in 1967 to 810 in 1970 with a slight decrease in 1969. Rather than increasing as the county did, the study region began to decline in 1971, dropping to 800. In 1972 it dropped further to 678. State figures during this period decreased from 12,087 in 1967 to 11,762 in 1969, rose to 12,622 in 1970, and thereafter dropped steadily to 12,347 births in 1971 and to 11,444 births in 1972. During this critical time of 1970-71, then, both the state and the study region showed decreases in the number of births by place of residence while the number in Rosebud County continued to climb, rising by approximately 8 percent from 1970 to 1971 (the 1970 figure of 166 represents approximately a 30 percent increase over the 1969 figure of 128).

The number of deaths by place of residence in Rosebud County (see table 1) has fluctuated during that period, showing an increase of approximately 23 percent from 1969 to 1970--an

Table 1

Vital Statistics - Montana

Year	Number of Live Births by Place of Residence			Number of Deaths by Place of Residence ¹			Number of Marriage Dissolutions ²		
	Rosebud County	Study Region	State	Rosebud County	Study Region	State	Rosebud County	Study Region	State
1967	101	688	12,087	78	439	6,549	22	129	2,361
1968	139	756	11,992	63	445	6,534	16	112	2,592
1969	128	741	11,762	66	436	6,694	15	113	2,806
1970	166	810	12,622	81	420	6,597	18	188	3,051
1971	179	800	12,347	70	416	6,860	28	168	3,366
1972	142	678	11,444	61	438	6,896	25	186	3,609
1973 ³	-	-	-	-	-	-	18	143	3,222

Source: Montana State Department of Health Annual Statistical Supplement, 1967-1969; State Department of Health and Environmental Sciences Montana Vital Statistics Reports, 1970-1971; and selected printouts and tables for 1972 and 1973 from the Bureau of Records and Statistics, Montana State Department of Health and Environmental Sciences.

¹Exclusive of fetal deaths.

²Divorces and annulments by place of occurrence.

³Through October and only by place of occurrence.

increase that parallels the increase in births, but has steadily decreased during the years 1970-72 (from 81 in 1970 to 61 in 1972). As with the number of births, the 1973 figure for the number of deaths by place of occurrence (data not shown) shows that the number of deaths may be increasing (67 in 1970 to 40 in 1972 to 42 by October of 1973). Study region figures yield a different trend for the same period. While the number of deaths increased from 439 in 1967 to 445 in 1968, it fell off steadily from then to 1971 when the figure was 416. In 1972 the number rose again to 438. State figures are erratic from 1967 to 1970 but show a steady rise from 6,597 in 1970 to 6,896 in 1972.

The number of marriage dissolutions (see table 2) in Rosebud County decreased by approximately 32 percent from 1967 to 1969 (from 22 to 15), and rose by almost 87 percent from 1969 to 1971 (15 to 28). From 1971 through 1973 (October) the number decreased again from 28 to 18. Study region figures paralleled the county-level trend from 1967 to 1969 by falling from 129 to 113, but deviated from that trend after 1969, leaping to 188 in 1970, decreasing to 168 in 1971, only to increase again to 186 in 1972 and decrease again to 143 in 1973. State figures show a steady rise in the number of marriage dissolutions from 2,361 in 1967 to 3,609 in 1972. The number of dissolutions in the state from January to October, 1973, was 3,222.

School Enrollment Data

Intrastate comparisons. The data regarding school enrollment are some of the most complete collected to date. School enrollment

Table 2
Public School Enrollment - Montana

<u>School Year</u>	<u>Rosebud County</u>	<u>Study Region</u>	<u>State</u>
1970-71	1,345	9,581	176,712
1971-72	1,398	9,456	173,559
1972-73	1,428	9,174	172,350
1973-74	1,601	9,449	172,045

Source: Computer printouts from the Office of
the Superintendent of Schools, Montana.

statistics are broken down by county, district, school, and grade level for the period extending from 1970-71 through 1973-74. Tables 2 and 3 were drawn up from information provided by the state superintendent of schools.

Summary. As might be expected, the school enrollment trend in Rosebud County is almost the reverse of the trends in the study region and the state. As table 2 shows, school enrollment in Rosebud County has increased to 1,601 this year (1973-74), 19 percent above the level in 1970-71 (1,345). School enrollment in the study region decreased from 9,581 in 1970-71 to 9,174 in 1972-73, beginning to rise again in 1973-74 (up to 9,449). The figures for the state clearly indicate a general decline in enrollment from 176,712 in 1970-71 to 172,045 in 1973-74. Table 3 presents the enrollment figures for individual counties in the study region for the past four school years. With the exception of Rosebud County, where the number of students increased from 1,345 to 1,601 during this period, the number of students enrolled in other counties remained fairly stable or dropped.

Welfare Data

Intrastate comparisons. The welfare data for table 4 have been taken from monthly statistical reports, whose information is comprehensive and current and extends from January 1970 through September 1973. While monthly averages are available for the state, monthly averages for the study region are not. Table 4 focuses on Rosebud County.

Table 3
Public School Enrollment - Montana Study Region

<u>County</u>	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>
Big Horn	2,507	2,505	2,475	2,493
Custer	2,767	2,694	2,485	2,559
Garfield	440	418	444	420
Musselshell	885	884	890	906
Petroleum	173	170	163	155
Powder River	732	700	632	638
Prairie	438	398	390	393
Rosebud	1,345	1,398	1,428	1,601
Treasure	294	289	267	284
TOTALS	9,581	9,456	9,174	9,449

Source: Computer printouts from the Office of the Superintendent of Schools, Montana.

Table 4

Welfare Data - Rosebud County, Montana

Year	OLD AGE ASSISTANCE	AID TO THE DISABLED	A.F.D.C.	MEDICAL ASSISTANCE	GENERAL ASSISTANCE	TRANSIENT RELIEF	FOOD STAMPS
	Average Monthly Caseload	Average Number of Cases per Month	Average Number of Families per Month	Average Number of Cases per Month	Average Number of Cases per Month	Average Number of Cases per Month	Average Number of Households per Month
1970	71 ¹ (62-75) ²	45 (42-47)	132 (115-147)	69 (50-84)	2.4 (0-4)	11 (2-29)	363 (32-42)
1971	65 (45-75)	44 (37-49)	131 (77-146)	69 (55-90)	2.0 (1-4)	15 (3-32)	51 (38-54)
1972	61 (32-73)	38 (27-42)	110 (86-126)	77 (64-104)	1.6 (0-5)	5 (0-25)	56 (49-69)
1973 ⁴	65 (63-66)	41 (40-42)	115 (109-122)	72 (29-103)	0.2 (0-1)	5 (0-14)	66 (56-77)

Source: Montana Department of Social and Rehabilitation Services Statistical Reports, January 1970-September 1973.

¹ounded off to the nearest decimal point. ³Reported only as of September 1970.

⁴Through September only.

The highest and lowest caseload per month during that period.

Summary. The average numbers of old age assistance cases, aid to the disabled cases, and aid to families with dependent children cases per month in Rosebud County have all followed a similar pattern: decreasing steadily from 1970 through 1972, and beginning to increase in 1973 (see table 4). The average number of medical cases per month remained at 69 in 1970 and 1971, jumped to 77 in 1972, and showed signs of falling somewhat in 1973 (average of 72 through September). The monthly average of general assistance cases has decreased from 2.4 in 1970 to 0.2 in 1973. Transient relief cases have declined also, falling from a high of 15 in 1971 to 5 in 1973. The average number of households receiving food stamps each month is the only category of assistance which accurately parallels the growth in population in Rosebud County. It has increased from an average of 36 households per month in 1970 to an average of 66 in 1973.

Arrest Data

The arrest data received to date concern juveniles and cover most of the counties in the region (seven, including Rosebud). The information is broken down by month, age, sex, race, county, rural or town residence, and length of residence for the months of February through December 1973.

These data can do little but provide a baseline with which data collected later can be compared. It is interesting to note, however, that 8 of the 29 juvenile offenses reported (or approximately 28 percent) in Rosebud County were in connection with

juveniles who had lived in the county for less than one year and that of those 8 arrests 4 were for drug-related offenses, one of which was for the sale of drugs. This contrasts with the lack of drug-related arrests among the remainder of the juvenile contacts in Rosebud County (data not shown).

Until February 1973, the only records that were kept by the Juvenile Probation Office of the Sixteenth Judicial District were for the overall number of juvenile contacts in the seven counties. These data are split into two time periods: June 1970 through December 1971 and January through December 1972.

Community Data

Very little data regarding specific communities are available from state-level sources. The smallest geographical unit that is usually employed is the county. The only exception is public school enrollment figures, which are broken down by district or school.

Table 5 presents a comparison of public school enrollments in the two study communities during the last four years. Both communities in Rosebud County show decreases from 1970-71 to 1971-72 but steady and rapid growth thereafter, with Colstrip increasing 26 percent from 1972-73 to 1973-74 and Forsyth increasing 12 percent from 1972-73 to 1973-74.

Some Final Comments Regarding the Numerical Data

Generally speaking, the smallest geographical unit employed by state data-gathering agencies is the county. Particular

Table 5
Public School Enrollment - Rosebud County Study Communities

<u>Year</u>	<u>Colstrip</u>	<u>Forsyth</u>
1970-71	251	583
1971-72	236	559
1972-73	269	585
1973-74	340	657

Source: Computer printouts from the Office of Superintendent of Schools, Montana.

community data must be gathered locally. The numerical information that has been collected to date is predominantly of a baseline nature. The most current, complete, and compatible trend data are summarized in table 6.

Table 6

Selected Variables for Rosebud County

Variable	Percent Change
<u>Vital Statistics</u>	
No. of births, change from 1971 to 1972 ¹	-21%
No. of deaths, change from 1971 to 1972 ¹	-13%
No. of marriage dissolutions, change from 1971 to 1972 ²	-11%
<u>Public School Enrollment</u>	
Change from 1972-73 school year to 1973-74 school year	+12%
<u>Welfare Data</u>	
No. of AFDC families, change in monthly average from 1970 to FY 1972-73	-12%
No. of individual general assistance cases, change in monthly average from 1970 to FY 1972-73	-54% (from 2.4 to 1.1)
No. of food stamp households, change in monthly average from 1970 to FY 1972-73	+78% (+25%) ³
No. of old age assistance cases, change in monthly average from 1970 to FY 1972-73	-11%

Sources: Montana State Department of Health Annual Statistical Supplements, 1967-69; State Department of Health and Environmental Sciences Montana Vital Statistics Reports, 1970-71; selected printouts and tables for 1972 and 1973 from the Bureau of Records and Statistics, Montana State Department of Health and Environmental Sciences; Computer printouts from the Office of Superintendent of Schools, Montana; Montana Department of Social and Rehabilitation Services Statistical Reports, January 1970 to September 1973.

¹By county of residence.

²By county of occurrence.

³In 1970, the number of food stamp recipients is reported during only September-December. The first percentage, The then, represents the change from 1970 to FY 1972-75. The second percentage represents the change from 1971 to FY 1972-75.

